

Pomona Valley ITS Project

Project Deliverable 2.2.3: Addendum Report to the 1995 Pomona Valley Forum Signal Synchronization Study

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1.0 Background

The 1995 Pomona Valley Traffic Signal Feasibility Study was completed by the Los Angeles County Metropolitan Transportation Authority (MTA). The study provided recommendations for an 8-year Transportation Systems Management (TSM) program based on the analysis of existing (1995) conditions, evaluation of deficiencies within the Pomona Valley, and input from the Pomona Valley Forum member agencies. Specific program improvements to mitigate deficiencies and build a base for advanced technology improvements were identified in the study. The program included improvements ranging from simple time-based coordination, to development of a Fairplex Event Traffic Management Plan and establishment of a subregional Traffic Management Center (TMC).

The 8-year TSM program was divided into two, four-year, implementation periods. The first four years of the program included arterial-specific improvements which were recommended to provide solutions to the existing deficiencies. The funding for these improvements was obtained by the Los Angeles County Department of Public Works (DPW) in the 1995 Call for Projects. DPW also led the effort to complete the design and construction of the signal coordination and timing projects of the program. The cost was approximately \$6,391,000.

This Addendum Report is intended to serve as an Update to the 1995 Study and provides new information about existing (2001) traffic conditions, local agency (stakeholder) operations and improvement recommendations. The appendices to this report contain figures that illustrate the traffic characteristics of each agency and tables with phasing and operating information. The information in this report will be used to define system requirements and complete the conceptual design.

1.1 Update Methodology

Information contained in this report was obtained through research, coordination meetings and correspondence with each of the stakeholders. Meetings were held with each of the stakeholders to collect current data and determine changes that have occurred since completion of the 1995 Study. The stakeholders contacted during this effort included:

Primary Stakeholders

- Los Angeles County DPW
- City of Pomona
- City of San Dimas
- City of Walnut
- City of Claremont
- City of Diamond Bar
- City of Industry
- City of La Verne
- Caltrans

Secondary Stakeholders

- Mt. San Antonio College
- Raging Waters
- Cal Poly Pomona
- Fairplex
- ACE
- Foothill Transit
- LACMTA





The following information was collected from each stakeholder:

- Updated information about arterial traffic volumes and levels of service (LOS) and traffic control systems
- Significant land development projects
- Roadway improvement projects
- Stakeholder objectives related to traffic control, monitoring, maintenance and interagency coordination

The remainder of this Addendum Report is organized into the following sections:

- 2.0 Status of 1995 Study Recommendations
- 3.0 Study Area Boundary and Regional Arterials
- 4.0 Traffic Conditions
- 5.0 Local Agency Summaries
- 6.0 New Project Recommendations





2.0 Status of 1995 Study Recommendations

The 1995 study included recommendations in four different levels of improvements. These levels were defined by the MTA Signal Support Group as "Tiers" of improvements that are related to increased complexity of technology. These "Tier" definitions were created by the MTA in order to "assist in the application, evaluation, coordination and implementation of the Local TSM improvements. In order to distinguish [the] wide variety of projects and be able to make a reasonable attempt in assessing future needs on a countywide basis." Each of the Tiers as defined by the Signal Support Group guidelines are described below:

- **Tier 1: Conventional Traffic Engineering Improvements** This includes projects such as signal coordination, intersection widening, signing and striping, and equipment upgrades.
- **Tier 2: Transit Improvements** This includes projects that improve bus operating speeds, such as transit signal priority systems, transit mobility improvements, and other general improvements to aid traffic flow by accommodating transit operation.
- **Tier 3: Traffic Control and Monitoring Systems** These improvements are focused on centralized computer systems that provide monitoring and control capability for signal systems serving regional and sub-regional traffic demands.
- **Tier 4: Smart Corridor and ITS Concepts** This includes application of intelligent transportation systems, such as an integrated traffic management system with data sharing between Forum agencies. Elements would include changeable message signs, closed-circuit television (CCTV), full event-related traffic control, and control capabilities from city-based Traffic Management Centers (TMCs).

Some of the recommendations identified in the 1995 study have been implemented by Los Angeles County, with cooperation and assistance from the Pomona Valley Signal Forum. The Forum-Wide Advanced Traffic Management System (ATMS) component of the PVITS project was identified in the 1995 study and is intended to build upon the synchronization improvements by utilizing the signal control hardware and timing projects. Advance Traveler Information Systems (ATIS) improvements were only generally identified in the 1995 study.

The Fairplex Traffic and Event Management Plan was identified in the 1995 study and is being completed as part of this Phase 1 Conceptual Design effort. The SR 60 ITS Conceptual Design is a new effort being developed as part of the Conceptual Design in order to address specific traffic management issues along SR 60 between I-605 and SR 57.

2.1 Los Angeles County and Pomona Valley Signal Forum Efforts

Table 1 on the following page provides a status summary of the recommendations in the 1995 Study. Updated information was provided by the Los Angeles County Department of Public Works and compared with input from the stakeholder meetings.





Table 1: Current Status of 1995 Recommendations					
Improvement Location	Tier	Improvement Description	Improvement Status	MOU ** Budget (\$1000)	Updated Estimate (\$1000)
Grand Avenue, from Cameron Avenue to 57 Freeway	1	Operational improvements, time-based coordination, and upgrades at 10 traffic signals.	Constructed per MOU.	\$111	\$163.50
Foothill Boulevard, from 30 Freeway to Mills Avenue	1	Install two dial-up and 17 controller modems for improved communication with State of California Department of Transportation staff to monitor signals and enhance signal coordination.	Completed by CalTrans at their expense in 1996.	\$10	\$ 0
Arrow Highway at Fairplex Drive	1	Install protected left-turn phasing	Left turn was not warranted when studied.	\$50	\$0
Arrow Highway at Garey Avenue	1	Restripe from single to dual left-turn lane in both directions, and signal modification.	Dual left turn was not warranted when studied.	\$160	\$15.4
Temple Avenue / Amar Road, from Creekside Drive to Bonita Avenue	1	Install WWV receivers. Full traffic actuation, signal modification, and retime traffic signals as necessary.	Constructed per MOU.	\$200	\$173.6
Towne Avenue, from 60 Freeway to Harrison Avenue	1	Install WWV receivers. Full traffic actuation, signal modification, and retime traffic signals as necessary.	Constructed per MOU.	\$335	\$369.7
White Avenue, from Mission Boulevard/ Foothill Boulevard	1	Install WWV receivers. Full traffic actuation, signal modification, and retime traffic signals as necessary.	Constructed per MOU.	\$240	\$308.4
Indian Hill Boulevard, from American Avenue to Holt Avenue	1	Install WWV receivers. Full traffic actuation, signal modification, and retime traffic signals as necessary.	Constructed per MOU.	\$196	\$170.5
Garey Avenue, from Corona Expressway to Foothill Boulevard	1	Full traffic actuation, signal modification, and fine tuning traffic signals as necessary.	Constructed per MOU.	\$318	\$309.4
Mission Boulevard at Corona Expressway	1	Restripe to add an eastbound through lane at approach to intersection to improve through vehicle movement at intersection.	Constructed under Diamond Bar / Mission L.O.A.	\$12	\$0
I-210 Freeway & Foothill Boulevard, various locations	1	Install signs advising use of Arrow Highway as an alternate route.	Rejected by CalTrans.	\$9	\$0
Mission Boulevard at Temple Avenue	1	Restripe to add right-turn lane in both directions.	Constructed under Diamond Bar / Mission L.O.A.	\$17	\$0





Table 1: Current Status of 1995 Recommendations (Continued)					
Improvement Location	Tier	Improvement Description	Improvement Status	MOU **	Updated Estimate (\$1000)
Fairplex	1	Development, design and implementation of an Event Management Plan for the Fairplex.	This project is included in Pomona Valley Intelligent Transportation System (PVITS) Project.	\$28	\$0
Foothill Boulevard, from Towne Avenue to SR 30	1	Widen and restripe for an additional traffic lane in both directions.	Under Design.	\$738	\$1,095.5
Base Line Road, from Foothill Boulevard to SB County Line	1	Install WWV receivers. Full traffic actuation, signal modification, and retime traffic signals as necessary.	Constructed per MOU. Under County-State agreement. *	\$105	\$120.0
Interstate 10 Freeway at Indian Hill Boulevard	2	Widen eastbound off-ramp to provide an additional lane (transit improvement)	Constructed by the City of Claremont.	\$312	\$0
Holt Avenue, from Corona Exwy. to Indian Hill Blvd.	2	Design of communication infrastructure to support active transit priority and signal synchronization for transit routes on Holt Avenue.	Project to be further defined upon completion of ITS Conceptual Design Report	\$230	\$230
Pomona Valley Intelligent Transportation System (PVITS) Project.	3	Development, design, and implementation of intelligent transportation system elements.	Conceptual Design \$803,000. Costs for Detailed Design and Construction \$2,632,000.	\$3,320	\$3,435
SUBTOTAL				\$6,391	\$6,391
PROJECT MANAGEMENT (2%)			\$127	\$127	
TOTAL			\$6,518	\$6,518	

Source: Los Angeles County Department of Public Works

The following projects were completed by agencies other than Los Angeles County DPW:

- Installation of modems at the Foothill Boulevard traffic signals between the 30 Freeway and Mills Avenue
- Widening of the I-10 Freeway eastbound off-ramp at Indian Hill Boulevard

The following projects were funded and completed by Los Angeles County DPW:

- Restriping of Mission Boulevard / Corona Expressway to add eastbound thru lane
- Restriping of Mission Boulevard / Temple Avenue intersection to add right-turn lanes

Caltrans installed temporary signs on the I-210 freeway advising the use of Arrow Highway as an alternate route during the reconstruction of the I-10 freeway but did not want them to remain permanently so they have since been removed.

^{*} CalTrans is contributing \$86,000 out of the \$206,000 total construction cost for this improvement.

^{**} A MOU (Memorandum of Understanding) was created between the Los Angeles County Dept. of Public Works and the Los Angeles County MTA after Call for Projects funding was approved for projects recommended in the 1995 Pomona Valley Signal Synchronization Study.

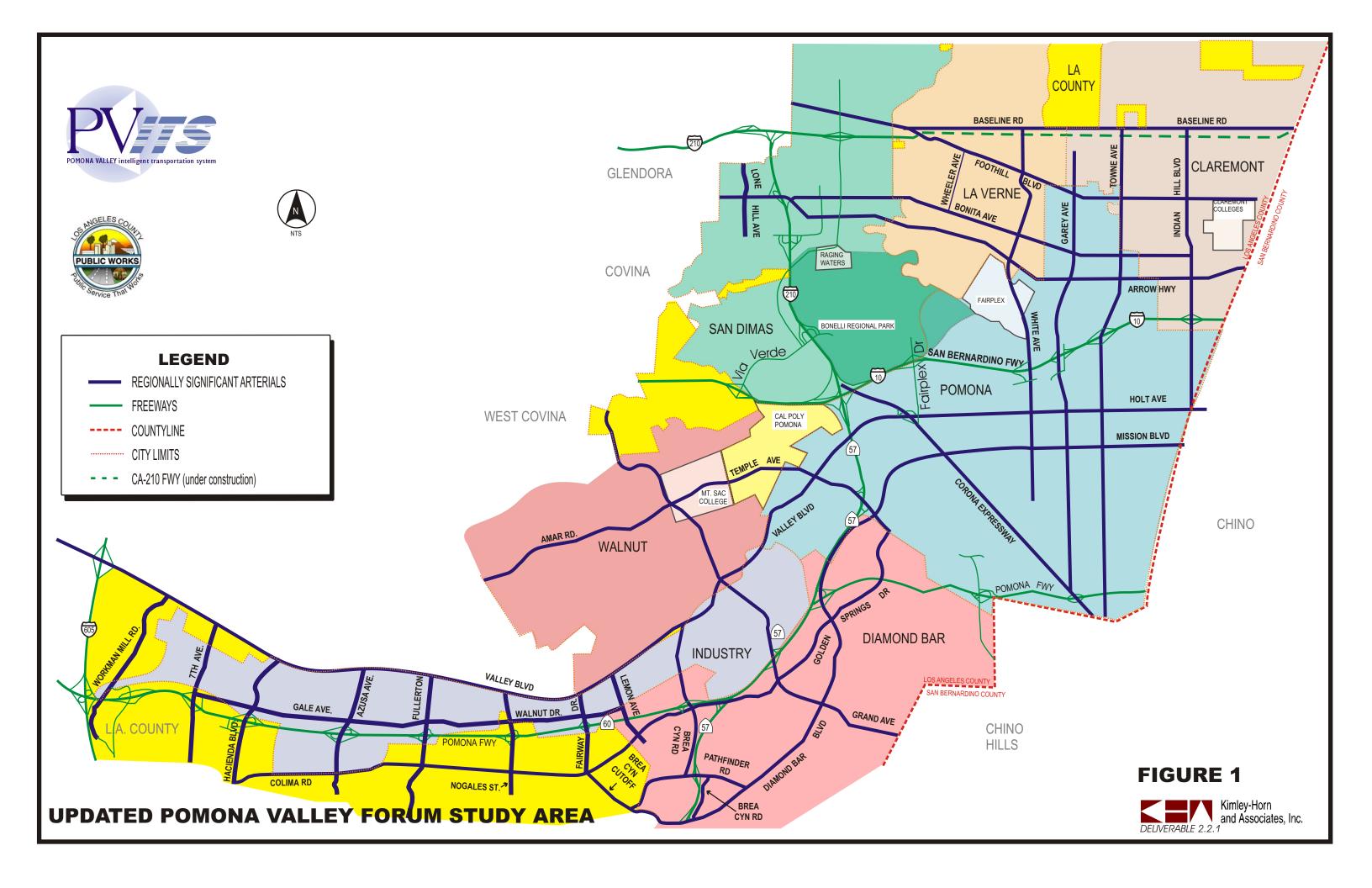




3.0 Study Area Boundary and Regional Arterials

The study area considered for this Addendum Report is different than the area defined in the 1995 Study. In addition to all of La Verne, Claremont, San Dimas, Pomona, Walnut, Diamond Bar, Industry, and small portions of Los Angeles County, the study area now includes the SR 60 corridor, all of the City of Industry, and more of the unincorporated Los Angeles County areas. **Figure 1** illustrates the updated study area and the location of regionally-significant arterials within the new study area. The number of regionally significant arterials in the seven cities and the unincorporated areas of Los Angeles County is also different. **Table 2** provides a comparison of the regionally significant arterials within the study area considered to be a part of the study area in 1995 and 2001.

Regional Arterial	Included in 1995 Study	Added As Part of Addendum Update	
Arrow Highway	X		
Baseline Road	X		
Bonita Avenue	X		
Brea Canyon Road		X	
Corona Expressway (SR-71)	X		
Diamond Bar Boulevard / Mission Blvd	X		
Foothill Boulevard	X		
Garey Avenue	X		
Golden Springs Drive	X		
Grand Avenue	X		
Indian Hill Boulevard	X		
Pathfinder Road		X	
Temple Avenue / Amar Road	X		
Towne Avenue	X		
Valley Boulevard / Holt Avenue	X		
White Avenue	X		
Lemon Avenue		X	
Fairway Drive		X	
Brea Canyon Cut off		X	
Nogales Street		X	
Colima Road		X	
Fullerton Avenue		X	
Azusa Avenue		X	
Hacienda Boulevard		X	
Gale Avenue		X	
7 th Avenue		X	
Workman Mill Road		X	







4.0 Traffic Conditions

The following information was collected and analyzed in order to provide updated 2001 traffic conditions on each of the significant arterials within the project study area.

- Arterial Average Daily Traffic (ADT) Volumes
- Traffic Signal Synchronization
- Major Freeway Construction Projects
- Transit System Data

4.1 Arterial ADT Volumes and Characteristics

Traffic Volumes

Traffic volumes provide an indication of travel patterns and roadway usage in the Pomona Valley. Heavily traveled roadways can benefit from improved signal synchronization. Existing (2001) traffic volume data was provided by each jurisdiction in the study area, obtained from traffic impact studies for planned developments and collected from new traffic counts. The arterials within the study area range from two to six lanes and experience average day traffic (ADT) volumes ranging from 9,000 to 65,000. **Figure 2** illustrates the 2001 ADT volumes on selected study arterials. **Table 3** indicates the 1995 and 2001 ADT volume ranges for selected arterials.

Table 3: Arterial ADT Ranges					
REGIONAL ARTERIALS	1995 ADT Range	2001 ADT Range			
North/South Streets					
Diamond Bar Boulevard	23,000 - 27,000	24,700 - 37,100			
Corona Expressway (SR-71)	55,000 - 59,000	57,000 - 63,000			
Garey Avenue	19,400 - 21,000	22,100 - 24,100			
Golden Springs Drive	9,800 - 22,000	10,500 - 22,700			
Grand Avenue	27,400 - 32,000	29,600 - 37,200			
Indian Hill Boulevard	16,400 - 17,500	22,500 - 23,100			
East/We	est Streets				
Arrow Highway	21,300 - 23,500	19,600 - 26,800			
Baseline Road	16,000 - 24,000	17,200 - 29,200			
Foothill Boulevard	19,000 - 52,000	16,200 - 69,800			
Holt Avenue	28,000 - 32,000	20,200 - 37, 900			
Valley Boulevard	21,500 - 45,000	22,100 - 48,000			
Mission Boulevard	25,000 - 27,000	16,400 - 23,300			
Source: Kimley-Horn and Associates, Inc. 2002					

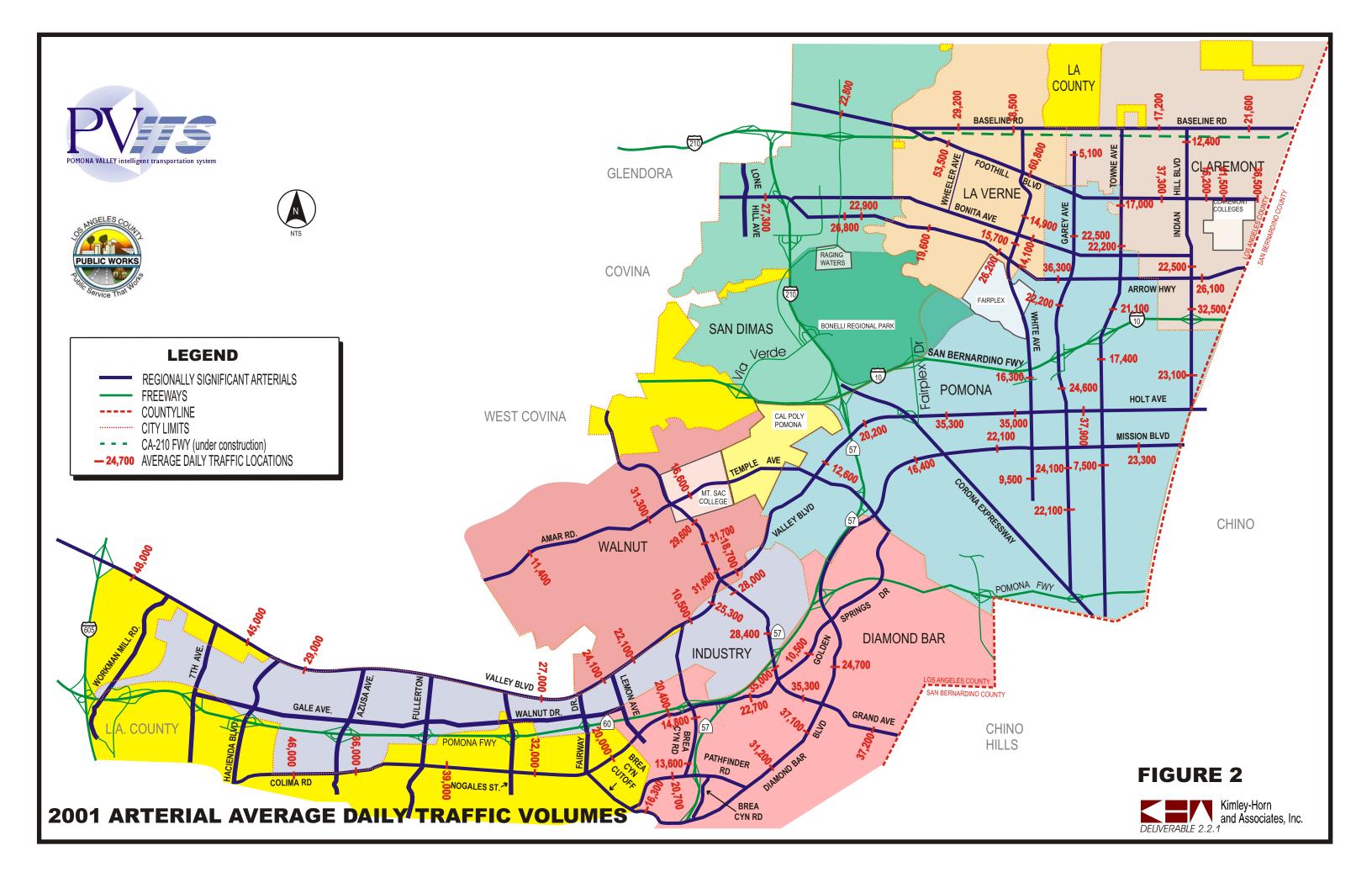






Table 4 indicates that most of the study area arterials have experienced an increase in ADT between 1995 and 2001. A high number of employment centers are located west of the Pomona Valley in the greater Los Angeles Area. This attraction to the west causes east-west freeways and major arterials such as Valley Boulevard, Golden Springs, Arrow Highway, Holt Avenue and Mission Boulevard to experience heavy westbound traffic flows in the a.m. peak period. During the p.m. peak period, eastbound freeways and arterials experience heavy traffic flows.

Existing Congestion Levels

Figure 3 illustrates Specific locations of significant congestion on study area arterials and intersections in 2001. **Table 4** presents arterial segments and intersections that experience significant peak hour congestion.

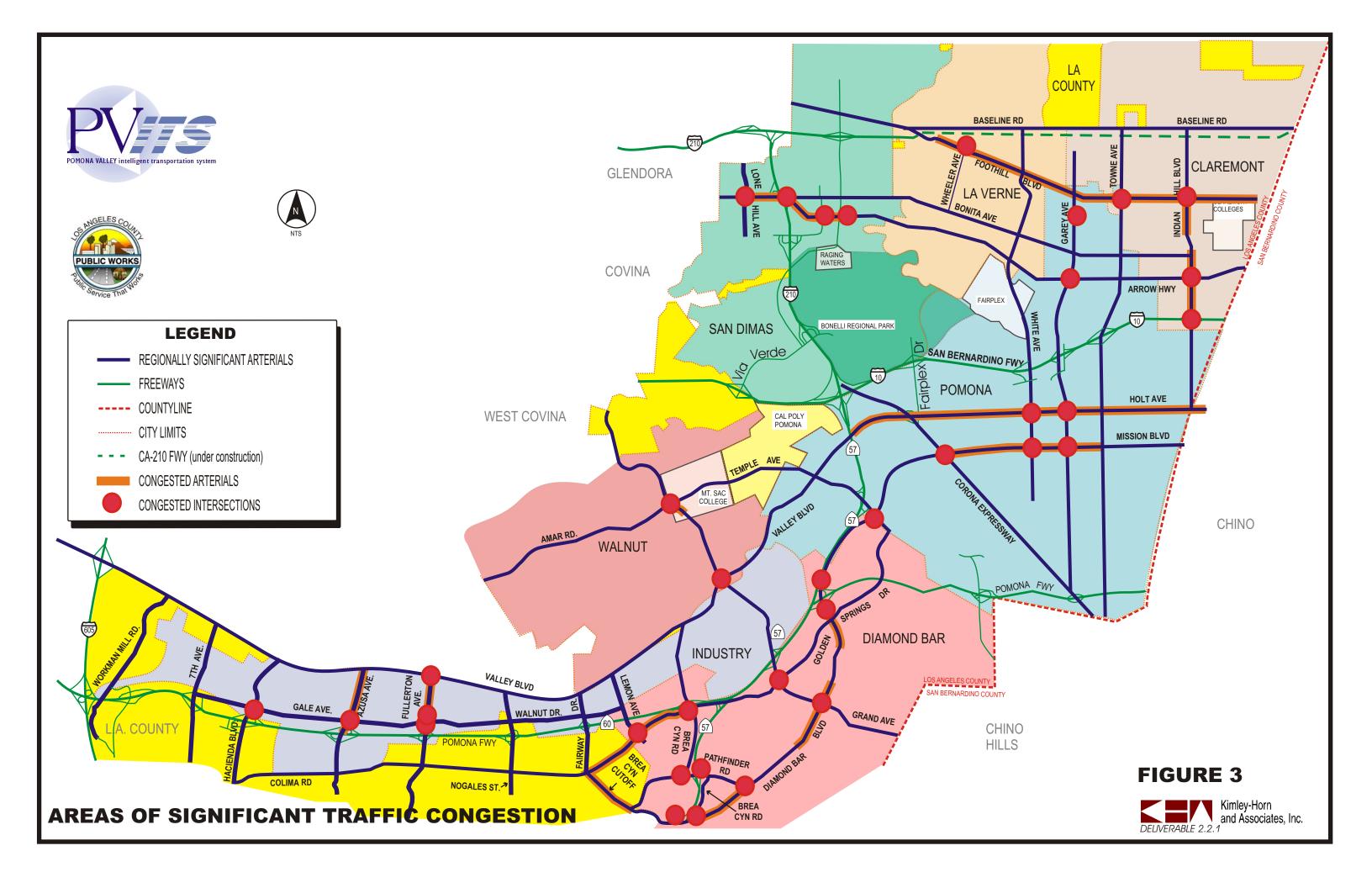






Table 4: Locations of Significant Congestion

CONGESTED INTERSECTIONS

- 7th Avenue / SR 60 Ramps
- 7th Avenue / Valley Boulevard
- Fullerton Road / SR 60 Ramps
- Fullerton Road / Colima Road
- Hacienda Boulevard/Gale Avenue
- Gale Avenue/Fullerton Avenue
- Valley Boulevard/Fullerton Avenue
- Lemon Avenue/Colima Road
- Golden Springs Drive at Brea Canyon Road
- Grand Avenue / Diamond Bar Boulevard
- Grand Avenue at Amar/Temple Avenue
- Grand Avenue/Golden Springs Drive
- Grand Avenue/Valley Boulevard
- Holt Avenue/Garey Avenue
- Holt Avenue/White Avenue
- Pathfinder/SR-57 Ramps
- Pathfinder Road/Brea Canyon Road
- Pathfinder Road/Diamond Bar Boulevard
- Indian Hill Boulevard/I-10 Ramps
- Indian Hill Boulevard/Arrow Highway
- Indian Hill Boulevard/Foothill Boulevard
- Towne Avenue/Foothill Boulevard
- Garey Avenue/ Arrow Highway
- Foothill Boulevard/Wheeler Avenue
- Arrow Highway /I-210 Ramps
- Arrow Highway /Lone Hill Avenue
- Brea Canyon Road /SR-60 Ramps
- Diamond Bar Boulevard/SR-57 Ramp
- Diamond Bar Boulevard/Brea Canyon Road
- Diamond Bar Boulevard/SR-60 Ramps
- Mission Boulevard/SR-71
- Mission Boulevard/White Avenue
- Mission Boulevard/Garey Avenue
- Gale Avenue / Hacienda Boulevard
- Gale Avenue / Azusa Avenue
- Arrow Highway / Cataract Avenue
- Golden Springs Drive / Lemon Avenue
- Brea Canyon Cut-off / SR 57 Ramps
- Diamond Bar Boulevard / Temple Avenue
- Garey Avenue / SR 66



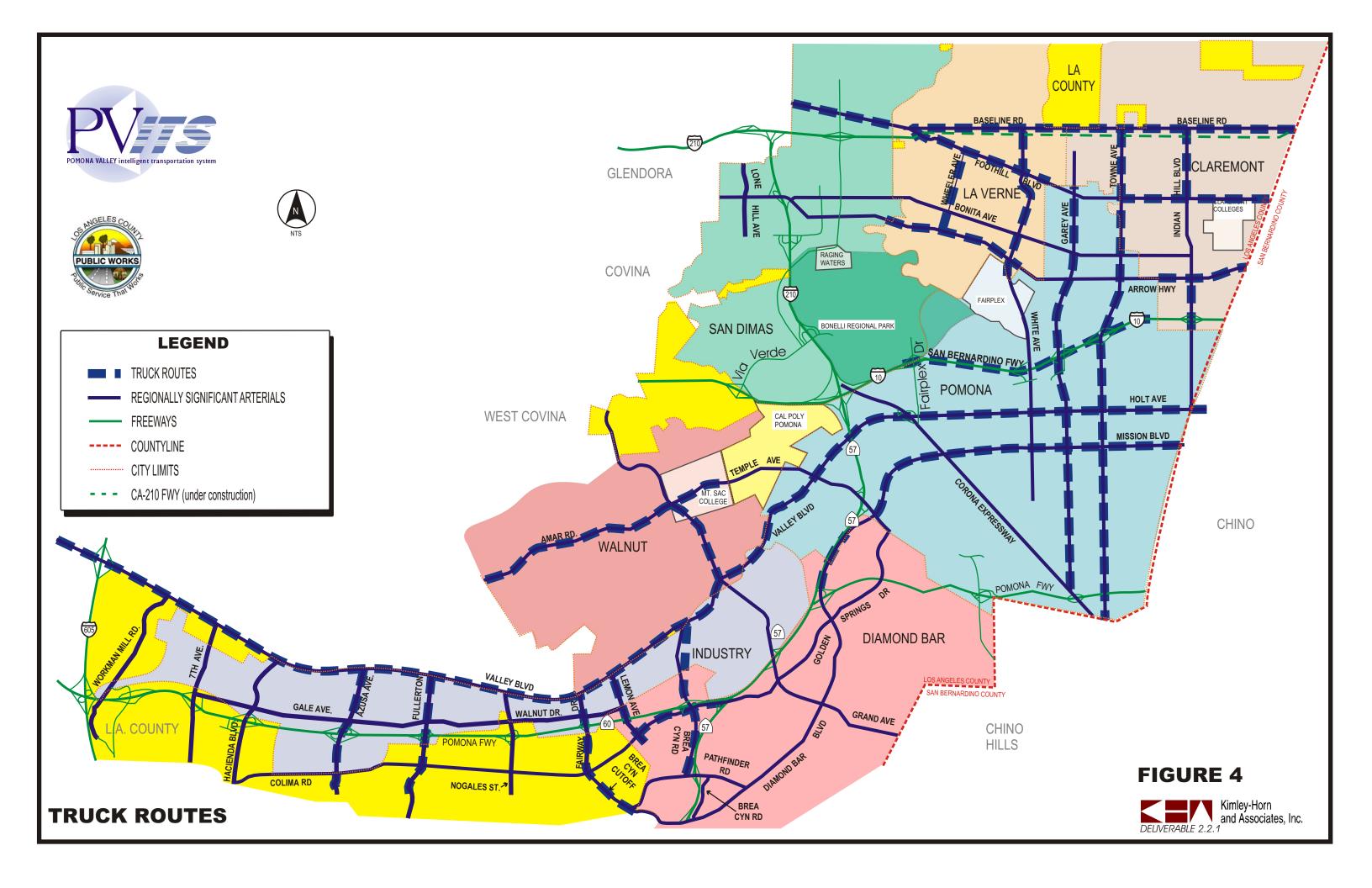


CONGESTED SEGMENTS

- Fullerton Avenue between Valley Boulevard and SR 60
- Diamond Bar Boulevard between SR-57/ SR 60 and SR 57 at location indicated in Figure 3.
- Brea Canyon Cutoff between Pathfinder Road and Colima Road
- Colima Road between Brea Canyon Cutoff and Brea Canyon Road
- Indian Hill Boulevard between Foothill Boulevard and I-10 (at locations shown in Figure 3)
- Holt Avenue/Valley Boulevard between Indian Hill Boulevard and SR-57
- Foothill Boulevard between Los Angeles County line and Claremont Boulevard
- Mission Boulevard between Towne Avenue and Corona Expressway (SR-71)
- Arrow Highway between Lone Hill Avenue and San Dimas Avenue
- Azusa Avenue between SR 60 and Valley Boulevard
- Baseline Road between Garey avenue and Towne Avenue
- Bonita Avenue between Damien Avenue and White Avenue
- Grand Avenue south of Amar Road (as shown in Figure 3)

Existing Truck Routes

The Pomona Valley provides a gateway into the Los Angeles basin from the east. Trucks traveling to and from the Los Angeles and San Pedro areas utilize the SR-60 and I-10 freeways and Valley Boulevard to access trucking distribution centers located within the City of Industry. Many residential areas have "No Trucks" designations, or truck weight limits posted on all of their streets. This includes the Cities of Walnut and Diamond Bar. **Figure 4** illustrates existing arterial truck routes.







4.2 Traffic Signal Synchronization

Signal Interconnect

Most of the cities within the study area have very little or no interconnect between traffic signals. Most of the signal timing is based upon time-of-day coordination.

Caltrans has signal systems in place along state routes and at freeway ramp intersections. The majority of these signals utilize hardwire, time-based coordination with a master controller controlling the clock. This is similar to the WWV time-of-day plan except the master controller sets all individual controller clocks and there is potential for more advanced operation. An underground interconnect conduit provides the communication between the master and individual controllers. Caltrans has interconnect along the majority of Foothill Boulevard (SR-66), as well as ramp locations along the I-10, SR-60 and SR-57. All existing communication cable is copper wire clusters ranging from six pair to twenty-five pairs of wires. The wire is located in conduit buried in the ground between intersections. Time-based traffic signal coordination was developed on most arterials by Los Angeles County, with maintenance by the Cities. This Traffic Signal Synchronization Program (TSSP) is discussed in section 5.8.

The City of Pomona utilizes a centralized system to administer timing control of traffic signals located on many of the city's arterials. The central computer is connected to the master controllers via telephone lines and direct cable (hardwire). This system provides two-way communication between controllers, with time-of-day and traffic responsive operation.

Existing interconnect within the study area is indicated in **Figure 5**.

4.3 Major Freeway Construction Projects

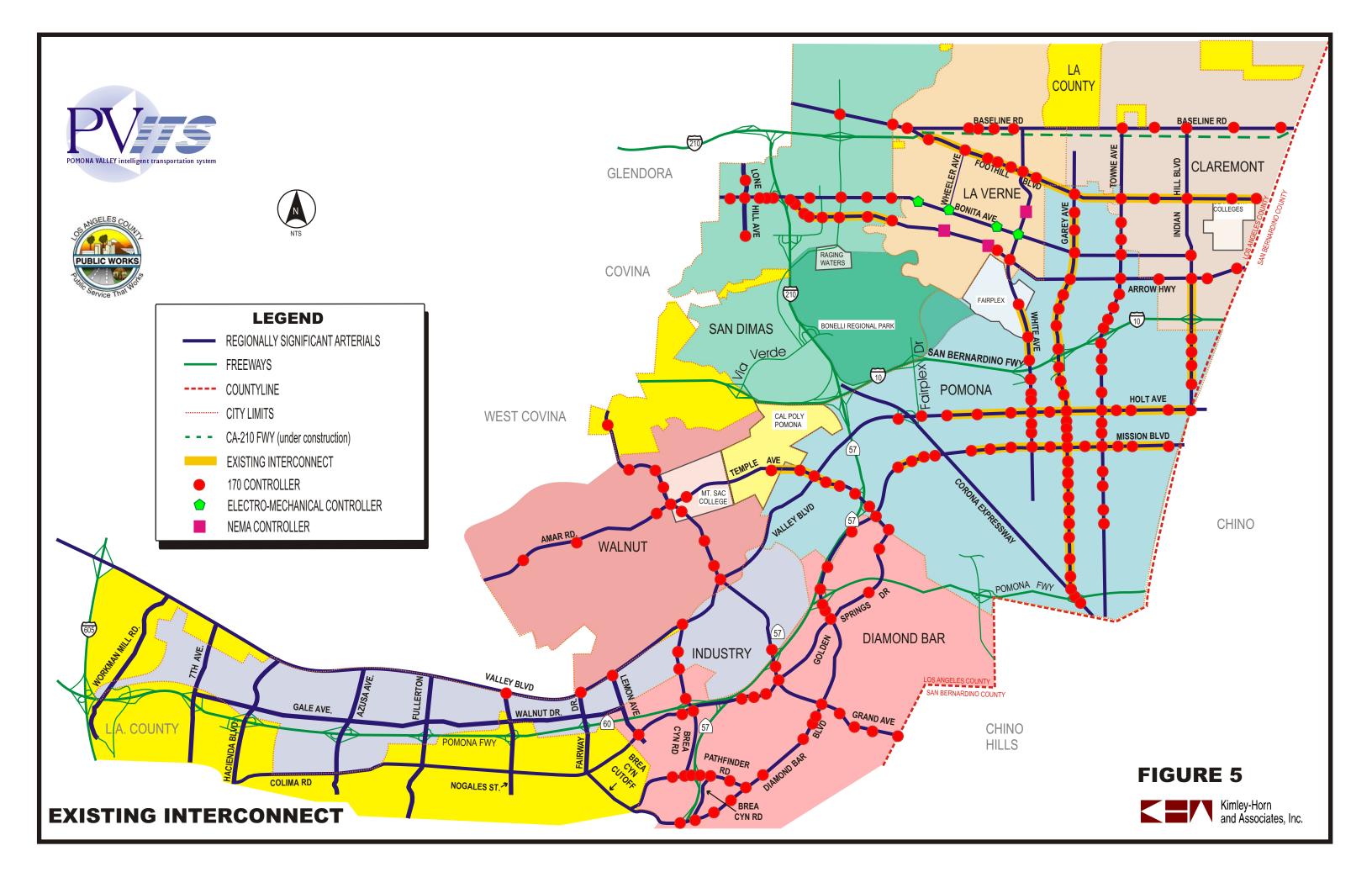
Two freeway construction projects are expected to significantly impact or change traffic patterns on arterials within the study area in the next 5 years.

Completion of the SR-210

When the SR-210 extension project (formerly proposed as Route 30) is completed it will connect the I-210 in San Dimas to the I-15 in San Bernardino County. The project is currently under construction. Actual data from any agencies affected by the freeway projects (Cities of La Verne, San Dimas or Claremont), or from Caltrans, on the estimated diversion of traffic from parallel routes, or the SR-57 and I-10 freeways, is not readily available. The SR-30 could reduce congestion at the I-210 / SR-57 / I-10 interchange, and could also reduce congestion along the Foothill Boulevard and Arrow Highway corridors.

Route 57 and 60 HOV Improvements

The proposed project is the modification of Route 57 Freeway from Lambert Road undercrossing in Orange County to SR-60 from Brea Canyon Road to Reservoir Street (near the Los Angeles/San Bernardino County Line). The HOV lanes on nearby segments of the SR-57 and SR-60 are completed. The remaining work to be done affects the Grand Avenue and Brea Canyon Road interchanges. The HOV lanes will be constructed in the median, and the freeway will be restriped and widened.







The existing bridge structure at Brea Canyon Road and Cold Springs Lane will be widened and the bridge structure at Tonner Canyon will be seismically retrofitted. Included in this project are direct connections between the SR-57 HOV and SR-60 HOV lanes. Modifications would also be made to the freeway interchange with Grand Avenue in Diamond Bar. The proposed project would assist in reducing some of the traffic congestion on the surface street bypass routes such as Diamond Bar Boulevard and Brea Canyon Road.

The implementation of the proposed project will add capacity to the freeway facility, and possibly remove some single-occupant vehicles from the corridor. It is anticipated that the project will be completed in the year 2004. It is estimated by Caltrans that these improvements will relieve some of the congestion on Valley Boulevard, Grand Avenue and Golden Springs Road.

4.4 Transit System Data

Foothill Transit provides most of the local public transit service within the project study area. The Los Angeles County Metropolitan Transportation Authority (MTA) also provides service on several arterials. The following two Foothill Transit routes have the highest number of passengers per hour:

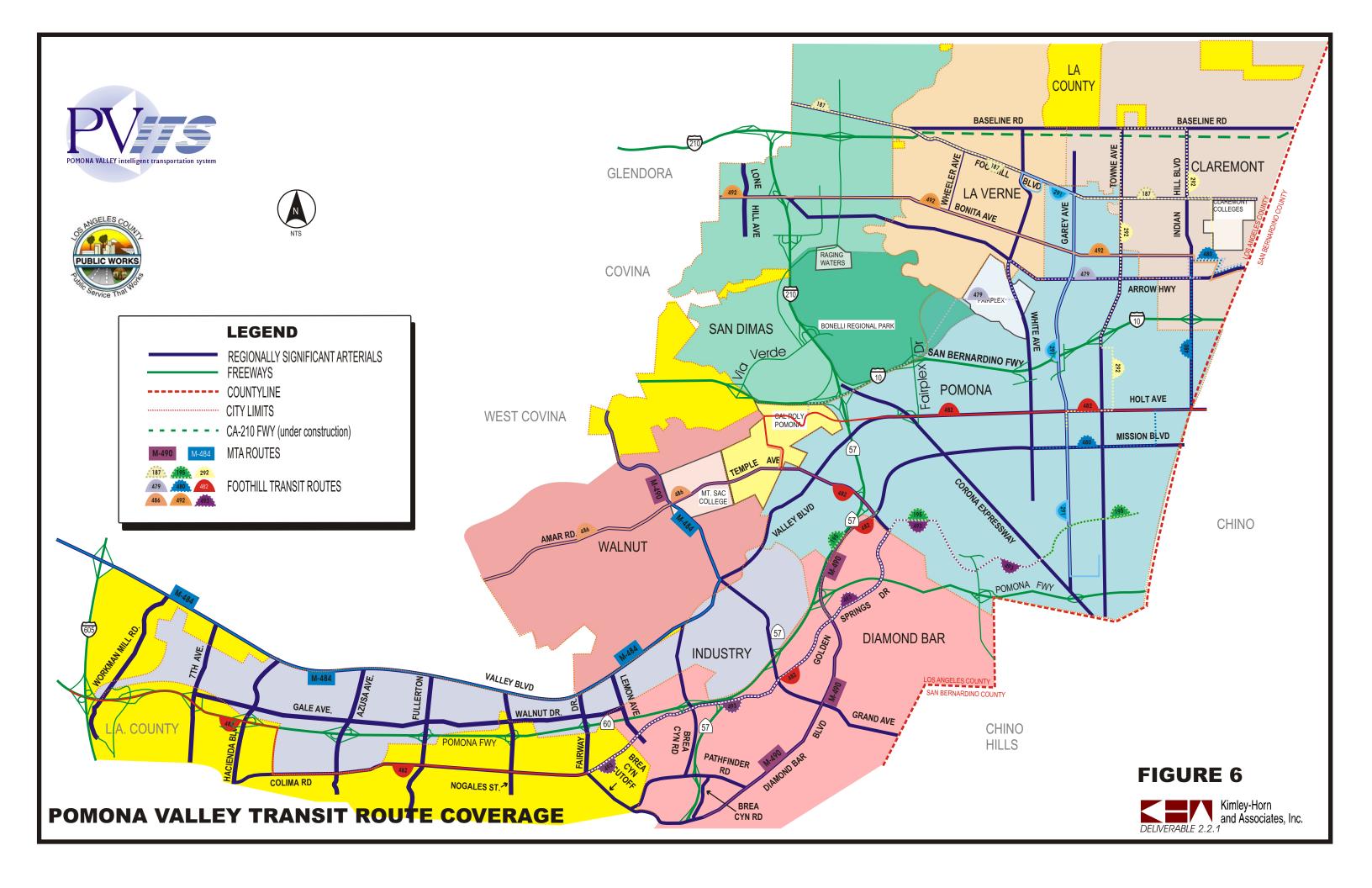
- Line 280 provides local service between Puente Hills Mall and Azusa, and serves an average of 47 passengers per hour.
- Line 486 provides local service from El Monte to Cal Poly and Puente Hills Mall, with express service to Los Angeles during rush hour. The line serves an average of 34 riders per hour.

Line 280 serves the project study area on its route through the City of Industry, while Line 486 serves the project area on its route to the Walnut area and the Cal Poly, Pomona campus The remaining lines, provided by Foothill Transit and the Los Angeles County MTA, utilize many of the regionally-significant arterials defined in this Addendum Update.

Metrolink commuter rail operates seven days a week on east-west rail lines that traverse the Pomona Valley. The two Metrolink lines in the study area run between downtown Los Angeles and points to the east of study area. Within the Pomona Valley, the Metrolink San Bernardino Line has stations at Claremont and Pomona, while the Riverside Line has stations in Downtown Pomona and in the City of Industry. The City of Industry has plans to expand the parking capacity of its Industry Metrolink Station on Brea Canyon Road by 600 vehicles.

Foothill Transit is planning to install eight electronic kiosks that will provide access to the agency's web page, along with selected web pages of local governments and other services. The content is expected to be periodically updated via a dial-up modem.

Figure 6 illustrates transit route coverage on regionally significant arterials within the study area.







5.0 Local Agency Summaries

This section provides a summary of the traffic control/monitoring, and maintenance practices of each Stakeholder. A more comprehensive description of the 2001 Stakeholder objectives and details about each agency are provided in separate conceptual design documents. All equipment data analyzed for 2001 conditions, including signal locations and controller types, interconnect locations and ITS-related items, was updated to reflect current conditions and planned improvements.

The 1995 Synchronization Study documented maintenance efforts for each Forum City, regarding staff dedications and type of maintenance possible, under city-provided labor and contractor-provided labor. Monthly or per unit maintenance costs were documented where possible. Updates to this data have been collected and documented in this report in order to update staff levels and maintenance costs for each jurisdiction.

The 1995 Study did not document each jurisdiction's ability to fund the on-going maintenance and daily operations of an expanded traffic control system. This Addendum addresses this issue, based upon information provided by each agency's staff. Maintenance costs and operations labor needs for each local city would grow with the implementation of the PVITS project - therefore this is an important effort to success of the project. This section provides an overview of the existing and planned traffic signal equipment, related communications and monitoring equipment, and includes general information regarding maintenance and operations issues.

5.1 City of Claremont

Traffic Control

Claremont is primarily a developed community with established traffic patterns. No major development projects are currently planned, outside of the current redevelopment of the west side of the downtown area. This area lies to the west of Indian Hill Boulevard, north of First Street.

The City of Claremont contracts out all of its signal maintenance at an annual cost of \$25,000. Operational problems with traffic control equipment are identified by maintenance contractors, city traffic department, police call-ins or public call-ins. The City does not feel it can respond to maintenance problems, so all maintenance work is contracted out. If a traffic control system is installed, maintenance training would need to be provided.

Figure A in Appendix 1 illustrates the current and planned traffic signals, and desired CCTV units, in the City of Claremont.

Existing System

- All current traffic signals utilize Type-170 controllers.
- The City does not have a Communication Master Plan.
- Signal coordination is done via fixed time plans at each controller.
- Signal timing efforts are contracted out.
- Arrow Highway currently has WWV equipment. There is a fiber optic conduit, owned by GST Telecom, that extends the whole length of this arterial within the City.
- Vehicle detection is done by an advanced vehicle loop detection system.
- Bicycle detection loops are installed at the intersection of Bonita Avenue / Indian Hill Boulevard





Baseline Road and Foothill Boulevard signalized intersections are controlled by Caltrans.

5.2 City of Diamond Bar

Diamond Bar is primarily a developed community with established traffic patterns.

Existing Traffic Signals

- A total of 50 signals (46 existing and four planned): 42 owned by Diamond Bar (38 existing and four planned); One owned jointly by Diamond Bar and Pomona; One owned jointly by Diamond Bar and Caltrans; Six owned by Caltrans
- All existing traffic signals utilize type 170 controllers and WWV antennas for time-of-day coordination.
- The City has installed conduit along its major arterials. The conduit is being installed when signals or roadways are upgraded. As the conduit system is not continuous, it does not currently contain any active communication cables or fiber.

The following intersections have video detection:

- Diamond Bar Boulevard / Quail Summit
- Golden Springs Drive / Rapidview
- Brea Canyon Road / Harbrook
- Gateway Center / Valley Vista Drive

• Bridge Note Drive / Lot 16

The City of Diamond Bar contracts out all of its signal maintenance at an annual cost of \$165,000. Problems with traffic control equipment are identified by maintenance contractors, city traffic department, police call in or public call in. The City rates its ability to respond to traffic problems as good to excellent. If a traffic control system were to be installed, training on the new system would need to be provided.

The City of Diamond Bar utilizes fixed time plans, advanced vehicle loop detection and video detection. No modifications or upgrades to interconnect systems have been made since 1995.

Figure B in Appendix 1 illustrates the current and planned traffic signals in the City of Diamond Bar.

5.3 City of Industry

The City of Industry operates 82 signals on regionally significant arterials in the study area and has agreements with Los Angeles County and the Cities of West Covina and Walnut for the operation of signals along Valley Boulevard. The County maintains all of the signals within Industry that utilize Type 170 controllers.

The City has a total of 82 signals on regionally significant arterials: 33 owned by Industry; 27 owned jointly by Industry and LA County; Six owned jointly by Industry and La Puente; One owned jointly by Industry and West Covina; Two owned jointly by Industry and Walnut; 12 owned by Caltrans; One owned jointly by LA County and La Puente

Figure C in Appendix 1 indicates the current and planned traffic signals in the City of Industry.





5.4 City of La Verne

La Verne is primarily a developed community with established traffic patterns. The completion of the SR 210 freeway, south of Baseline Road, will be the most significant change within La Verne during the study period.

Existing System

- A total of 25 signals: Ten owned by La Verne; Two owned jointly by La Verne and San Dimas; 13 owned by Caltrans
- Caltrans-controlled signals utilize 170-type controllers.
- Traffic signals on Arrow Highway utilize WWV antennas for synchronization.
- A hardwire interconnect is used for the traffic signals along White Avenue.

There is limited City-owned signal interconnect, although Caltrans has installed a limited length of interconnect on Foothill Boulevard.

Since 1995, the City has added traffic signals at the following four intersections:

- Arrow Highway / E Street / Fairplex Drive
- Foothill Boulevard / Moreno

• Baseline Road / Esperanza

 Foothill Boulevard / Towne Center Drive

The City of La Verne contracts out all of its signal maintenance at an annual cost of \$40,000. Operational problems with traffic control equipment are identified by maintenance contractors, as well as police and public call-ins.

The City of La Verne has stop line loop detection, advanced vehicle loop detection and video detection. Traffic signals on Arrow Highway are synchronized via WWV coordination, while traffic signals on White Avenue are linked via hardwire interconnect.

Figure D in Appendix 1 indicates the current and planned traffic signals, and CCTV units, in the City of La Verne.

5.5 City of Pomona

Pomona has the largest roadway system of any city within the study area and operates approximately 160 traffic signals. The City maintains all of their signals and has agreements with the cities of Claremont, Diamond Bar, and Los Angeles County to jointly operate signals that overlap their jurisdiction. All of Pomona's signals are Type 170 controllers and many utilize Bitrans 200 software. Signals along Holt Avenue, Indian Hill Boulevard, Garey Avenue Reservoir Street, Mission Boulevard and a small section of White and Park have cable in place but are not interconnected.

Pomona is primarily a developed community with established traffic patterns. No new major development projects will be occurring within the study area before 2006.





Existing System

- A total of 92 signals on regionally significant arterials: 77 owned by Pomona; Two owned jointly by Pomona and Claremont; One owned jointly by Pomona and Diamond Bar; 12 owned by Caltrans
- Los Angeles County has timed and implemented synchronization of signals on all major arterials within Pomona.
- The TRANSYT program is utilized to develop signal timing plans.
- The City has one electronic information kiosk in the City Hall lobby. Meeting information and real-time traffic maps are provided.
- The City utilizes advanced vehicle loop detection, as well as video detection at certain intersections (illustrated in Figure 5).
- There are some existing communication links in the field, such as the fiber conduit on Mission Boulevard.
- There are currently ten intersections with video detection (illustrated in Figure E).
- There are no major problems with the current video detectors. A few shadow problems from tree branches have been corrected.
- Existing communication infrastructure is limited, but there is a fiber conduit into City Hall.
- There is a fiber optic communication system that connects the schools. The Pomona Unified School District has begun development of a citywide network utilizing a utility pole-mounted system.
- Pomona has QuicNet II, but it is not currently used because a cable was damaged. The cable is being repaired, and in the interim the signals are running on time-of-day (WWV) coordination.

Table 5 provides information about 12 signalized intersections that the City has added since the previous study... Nine of the new intersections have video detection.

Table 5: New Pomona Traffic Signals				
Intersection	Video Detection Y/N	On Regional Arterials Y/N		
Towne Avenue @ Marketplace	Y	Y		
Philadelphia @ San Antonio	Y	N		
White @ Lexington	Y	Y		
White @ Franklin	Y	Y		
Park @ Lexington	Y	N		
Park @ Franklin	Y	N		
Rio Rancho @ Phillips Ranch Road	Y	N		
Village Loop @ Phillips Ranch Road	Y	N		
Village Loop @ Rustic Glen	Y	N		
East End @ Pueblo School Entrance	Y	N		
• White Avenue @ 9 th Street	N	Y		
White Avenue @ Grand Avenue	N	Y		





The City of Pomona maintains all of its own traffic signals using city-staff for preventative maintenance and minor repairs. The City employs six people to maintain their traffic control system. Operational problems with traffic control are identified by the City traffic department, and police and public call-ins.

The City of Pomona uses a combination of stop line loop detection, advanced vehicle loop detection and video detection. Traffic signal controllers utilize fixed timing plans or time of day plan selection. Hardwire interconnect exists on selected arterials, but no modifications or upgrades to interconnect systems have been made since 1995. Existing interconnect conduit along Mission Boulevard, Holt Avenue and Indian Hill have spare capacity for expansion.

Figure E in Appendix 1 indicates the current and planned traffic signals, and CCTV units, in the City of Pomona.

5.6 City of San Dimas

San Dimas is primarily a developed community with open space remaining in hills and canyons. For the developed areas of the City, traffic patterns are established.

Existing System

- 13 signals on regionally significant arterials: 9 owned by San Dimas; One owned jointly by San Dimas and La Verne; One owned jointly by San Dimas and Glendora; One owned jointly by San Dimas and Caltrans; One owned by Caltrans
- There are 38 signals on all city roadways, all with Type 170 controllers and WWV coordination.
- The current signals utilize advanced vehicle loop detection.
- Timing plans are implemented during selected times of the day, when possible, to assist in alleviating congestion.
- Signal timing plans are prepared by Los Angeles County, or consultants, depending on the breadth of system timing changes.
- The City feels that they could better manage seasonal traffic variations if the resources were available to implement new signal timing plans more often.
- The north and south approaches of the Arrow Highway / San Dimas Avenue intersection have video detection.
- Portions of Covina Boulevard have interconnect conduit, between Cypress Avenue and Arrow Highway.
- Badillo Avenue has interconnect conduit, on its segment within San Dimas.
- Arrow Highway has operational interconnect conduit, installed by the City of San Dimas with signal coordination done as part of the Los Angeles County signal synchronization projects.
- An interconnect project was recently completed on Covina Boulevard along the San Dimas High School frontage.
- Fiber is strung above ground via utility poles along Walnut Avenue and Arrow Highway. This fiber is connected into the east side of City Hall, connecting the City's Maintenance Yard to City Hall.

The city contracts out for all maintenance of its signals at an annual cost of approximately \$100,000. Problems with traffic control equipment are identified by maintenance contractors, City traffic department, and police or public call-in. The City rates its ability to respond to traffic problems as good to excellent. The City believes that if a traffic control system were installed, training would need to be provided.





The City has indicated the need for more interaction with Caltrans concerning coordination between City signals and Caltrans signals.

Figure F in Appendix 1 indicates the current and planned traffic signals on regionally significant arterials in the City of San Dimas.

5.7 City of Walnut

Walnut is primarily a developed community with established traffic patterns. The City of Walnut operates a total of 15 traffic signals on regionally significant arterials within the city study area. All current traffic signals utilize 170-type controllers and WWV antennas for time-of-day coordination. The City currently has no plans to modify or improve this equipment. The City of Walnut contracts out all of its signal operations and maintenance to Los Angeles County. The City does not have video detection at any of its signals. The City utilizes stop line loop detection, and advanced vehicle loop detection. The City does not have a signal interconnect system.

Figure G in Appendix 1 indicates the current and planned traffic signals in the City of Walnut on regionally significant arterials.

5.8 Los Angeles County

Los Angeles County is responsible for maintenance of many of the traffic signals within the study area. The County also maintains all unincorporated installations and contracts with many cities in the County for maintenance of city installations. All of the County's signals have been divided into 8 districts. Each district has one person assigned to preventative maintenance (186 signals per person). Duties include timing check, walk through, physical damage inspection and burn out repairs. Overall, signal maintenance staffing is at approximately one person per 45 intersections, including administration. The program is currently staffed from 6:30 AM to 4:00 PM, Monday to Friday.

The County uses WWV for signal synchronization and does not have any ITS components or communications equipment within the study area. The County has assisted the Forum cities in implementing synchronization programs utilizing WWV time synchronization. Signal timing programs have been implemented by the County, where agreements with local jurisdictions have allowed this. The signal timing maintenance has been given to some of the local jurisdictions. **Figure H** in Appendix 1 indicates the location of traffic signals where coordinated timing programs have been implemented as part of the County's Traffic Signal Synchronization Program (TSSP). The figure also indicates the roadway segments where synchronization of signals was done, via WWV coordination. **Figure I** illustrates the phasing of the synchronization programs of Los Angeles County, and the locations of planned forum synchronization projects.

5.9 Caltrans

Caltrans District 7 operates and maintains approximately 32 signals within the study area, at intersections along Baseline Road, Foothill Boulevard, and the Corona Expressway, and at freeway ramp traffic signals. The SR-210 extension project, along with necessary traffic control improvements, was incorporated into the Update within the 2006 timeframe.

All Caltrans signals are controlled by Type 170 controllers. Caltrans has hardwire interconnect between most of its isolated ramp intersections. Interconnect also exists along the majority of Foothill Boulevard (SR-66). Caltrans District 7 operates and maintains the majority of traffic signals along Baseline Road





(SR-30), Foothill Boulevard (SR-66) and the Corona Expressway (SR-71), in addition to the freeway ramp traffic signals.

6.0 New Recommendations

6.1 Fairplex Traffic Management Plan

One of the recommendations from the 1995 Study included development of an Event Traffic Management Plan for the Fairplex in Pomona. Because the Fairplex is a major traffic generator in the Pomona Valley, Los Angeles County and the Pomona Valley cities have decided that a specific traffic management scheme should be developed to manage event traffic around the Fairplex and roadways in its vicinity. The Fairplex facility hosts the annual Los Angeles County Fair, the National Hotrod Association (NHRA) Winternationals and other races. Many other smaller events are also hosted at the Fairplex.

Several separate Conceptual Design deliverables for Fairplex Event Traffic Management Plan provide information on how the Plan was developed.

Recommendations from the Plan include 4 physical roadway improvements, 6 transit improvements, and 21 ITS/Event Management improvements.

Figure 7 illustrates the locations of the Event Traffic Management Plan recommendations. **Figure 8** illustrates the locations recommendations on major routes to and from the Fairplex. All recommendations on ITS components for the Fairplex Traffic Management Plan are detailed in the PVITS project deliverable 3.6.1.

6.2 State Route 60 ITS Conceptual Design

Conceptual Design for an ITS system for traffic management along the SR 60 Corridor was not included in the 1995 Study, but has been completed as part of this phase of the PVITS Project. SR 60 is major east-west freeway with Los Angeles County and has a high percentage of truck traffic. The existence of long, parallel streets in the same corridor creates a potential for traffic diversion to surface streets when a traffic incident occurs. For this reason, an ITS concept was developed for this corridor that could help control and direct this diverted traffic during periods of heavy congestion.

Figure 9 illustrates the locations of existing ITS components in the SR 60 corridor within Industry and surrounding areas of Los Angeles County. All recommendations are described in detail in the PVITS project deliverable 2.3.1.





LA VERNE

LEGEND



PHASE I IMPLEMENTATION



PHASE II IMPLEMENTATION



PHASE III IMPLEMENTATION



FREEWAYS ARTERIALS / ROADS



PARKING AREAS



LANE CHANGE SIGN



CCTV



FLIP-DISC SIGN



ARTERIAL VOLUME **DETECTION**



RAILROAD GRADE **CROSSING QUAD GATES**



TRANSIT / SHUTTLE **IMPROVEMENT**



TRAFFIC SIGNALS IN VICINITY

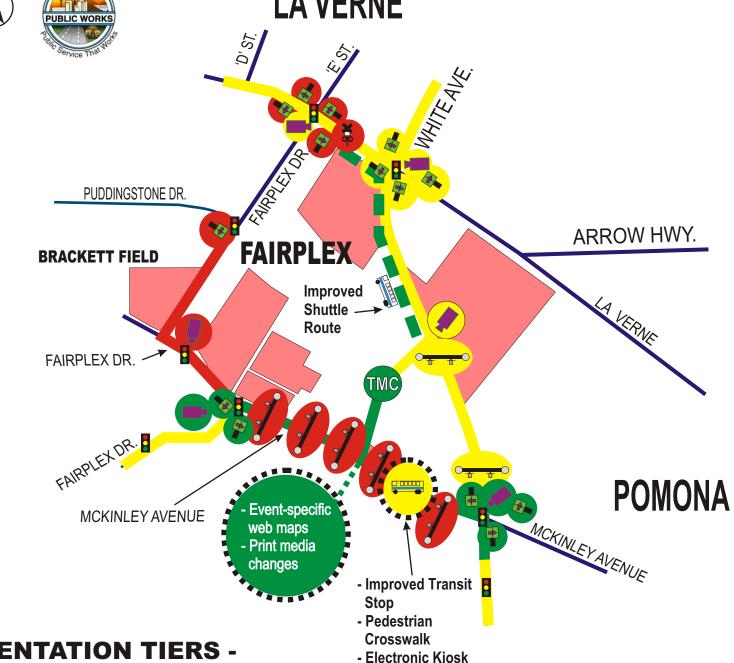
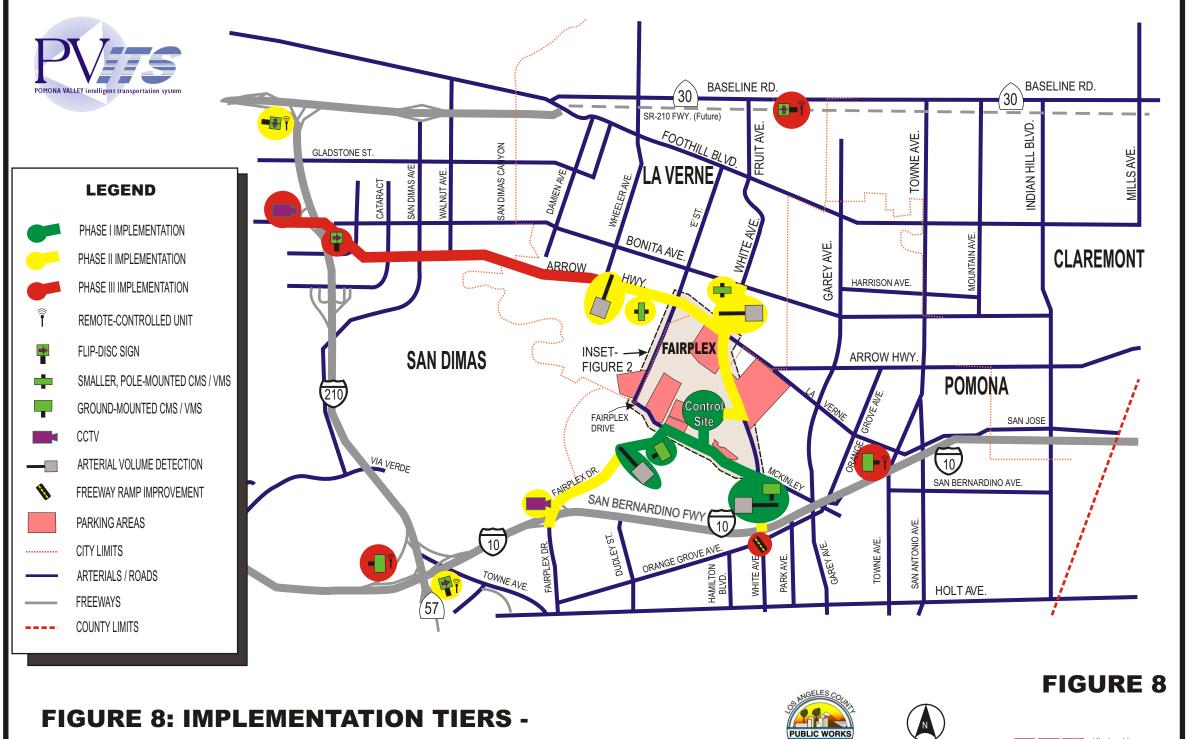


FIGURE 7: IMPLEMENTATION TIERS -ON ROADWAYS SURROUNDING FAIRPLEX



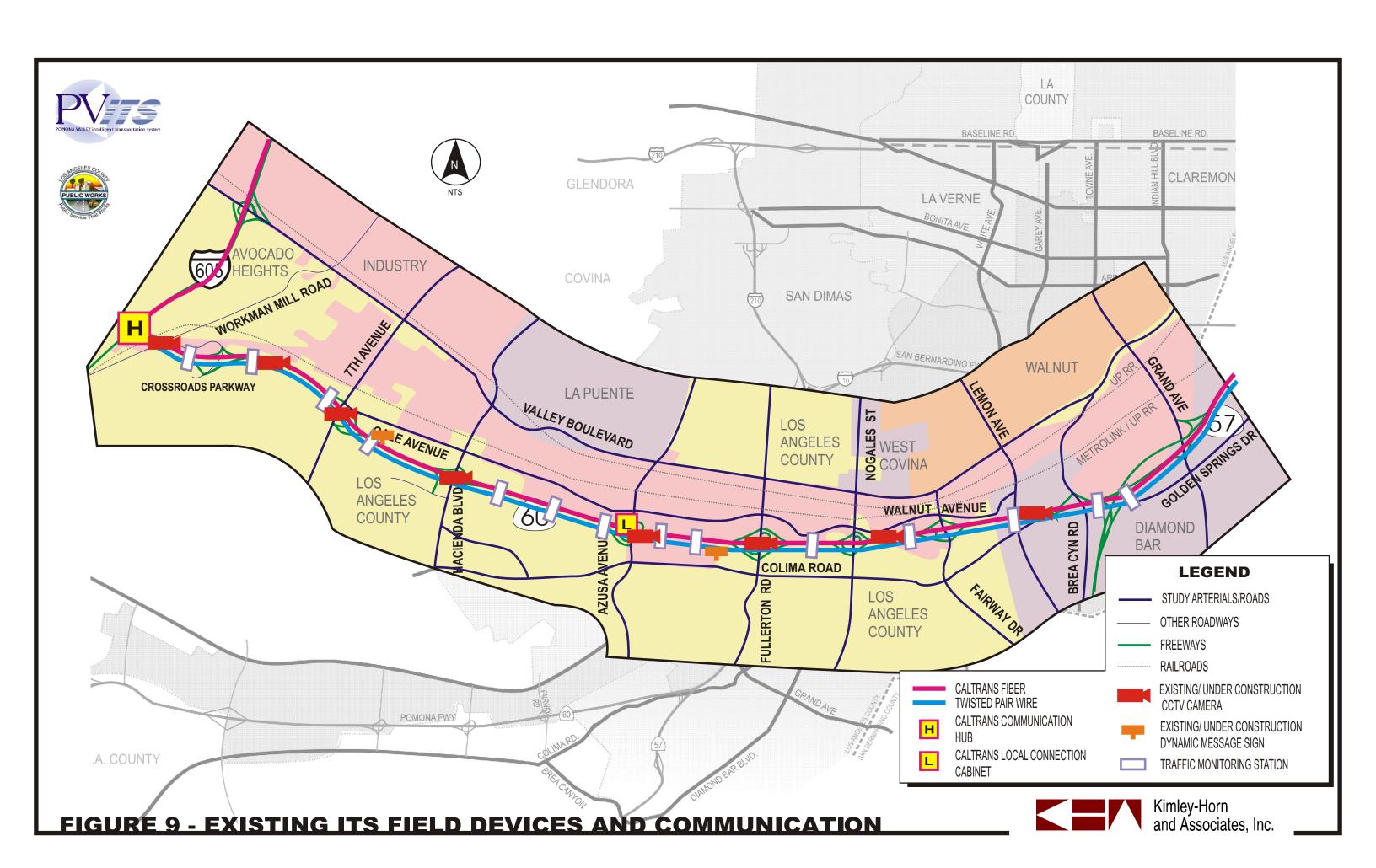


ON REGIONAL ROUTES TO AND FROM THE FAIRPLEX













Appendix 1: City Figures

Figure A: City of Claremont Traffic Signals

Figure B: City of Diamond Bar Traffic Signals

Figure C: City of Industry Area Traffic Signals

Figure D: City of La Verne Traffic Signals

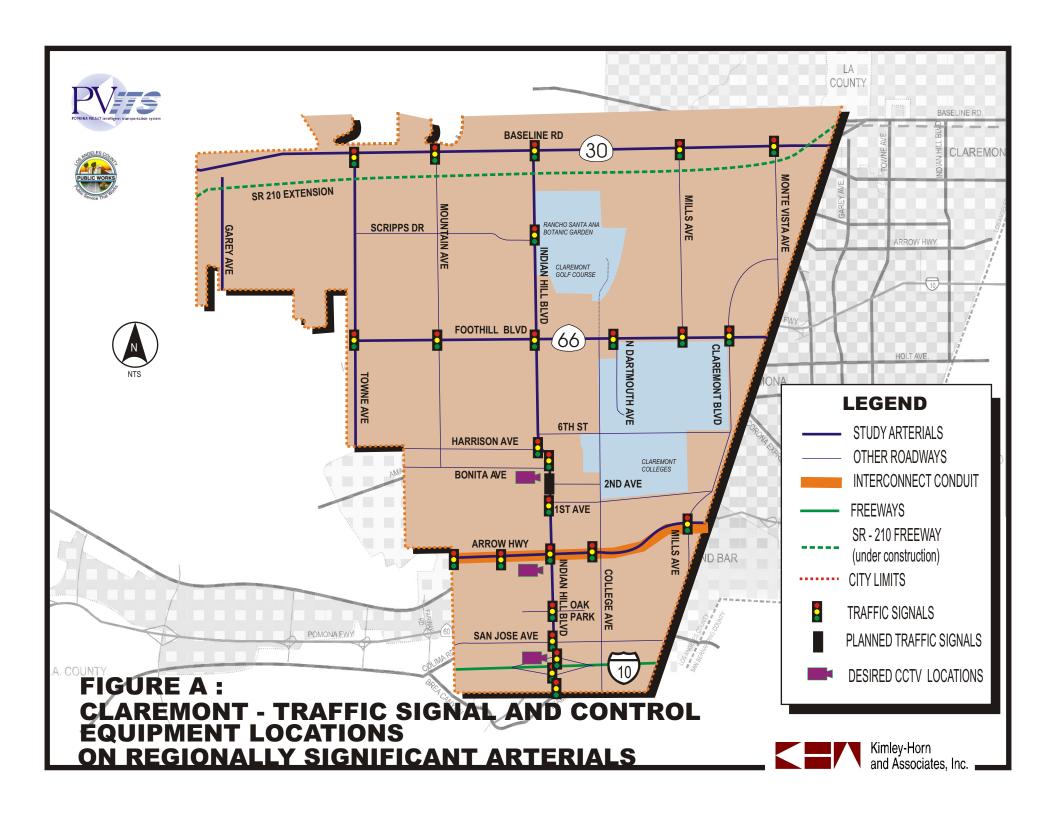
Figure E: City of Pomona Traffic Signals

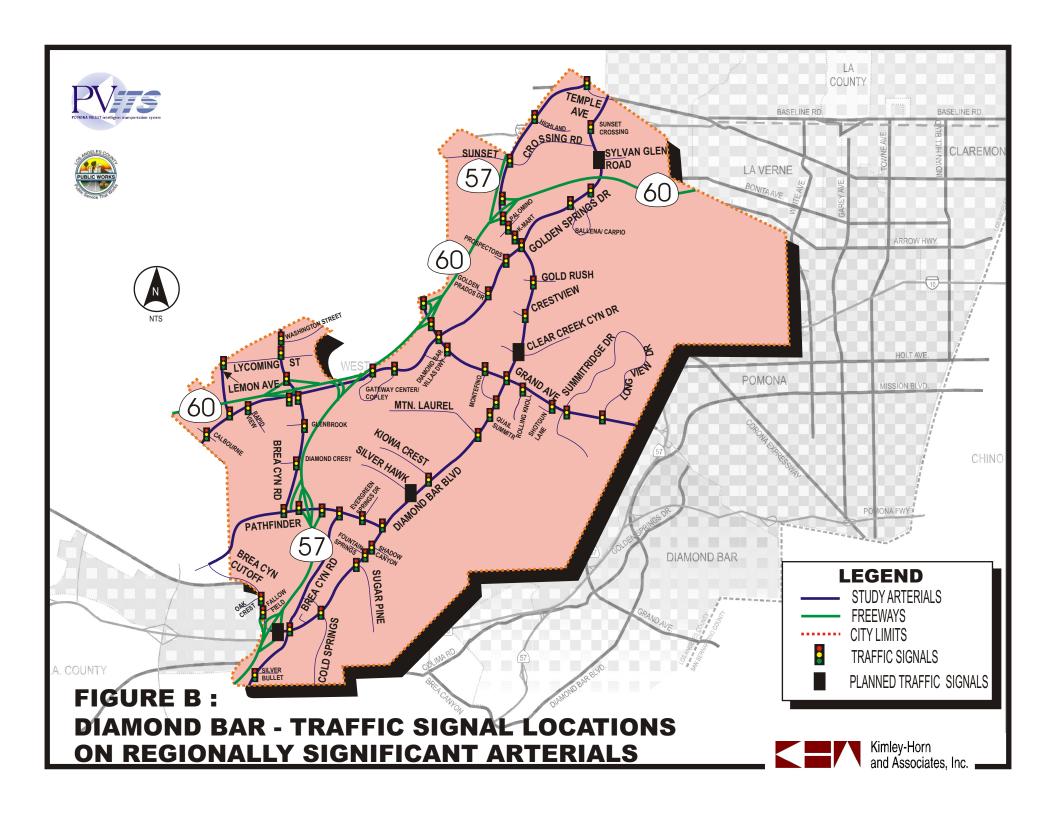
Figure F: City of San Dimas Traffic Signals

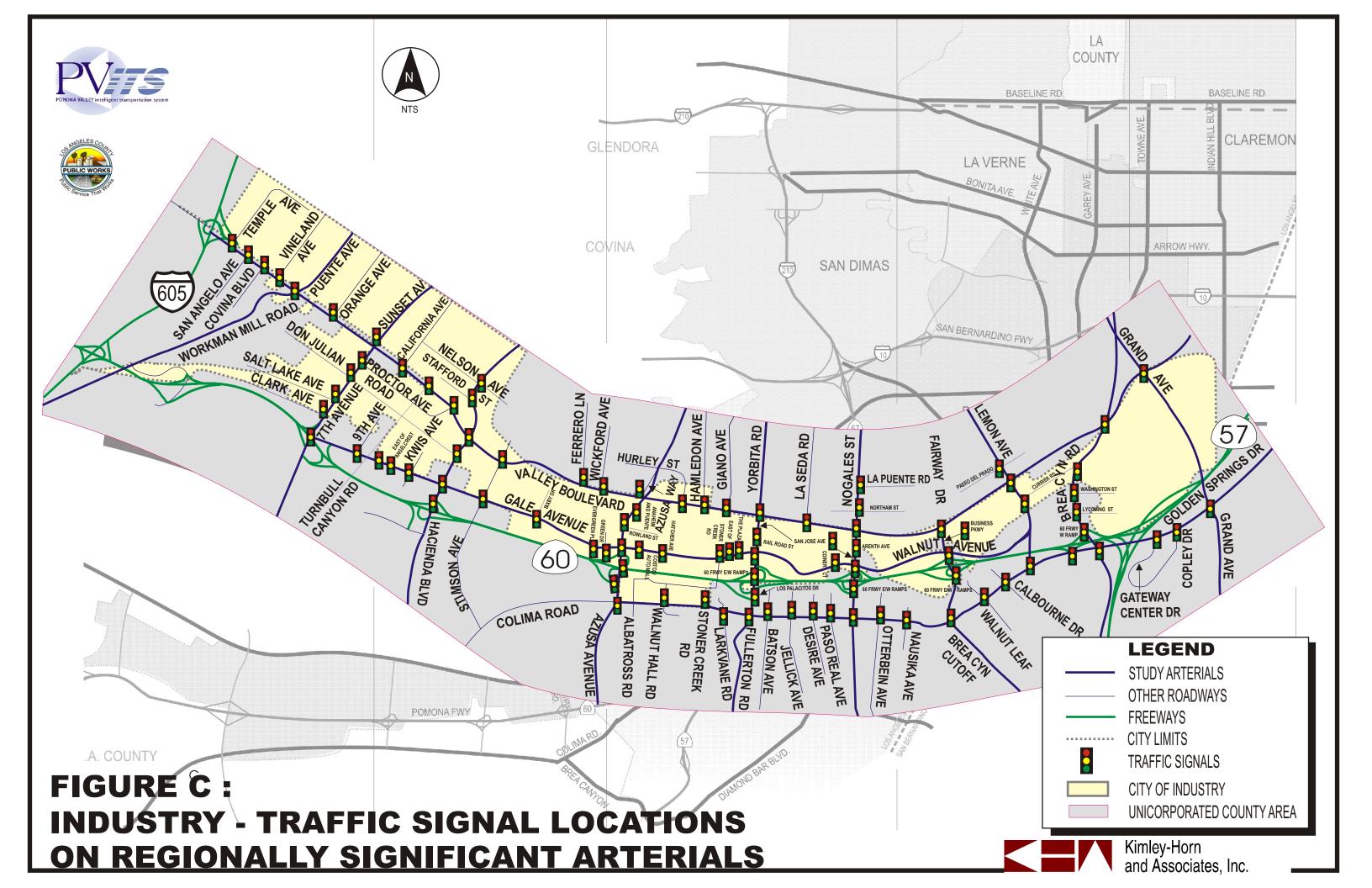
Figure G: City of Walnut Traffic Signals

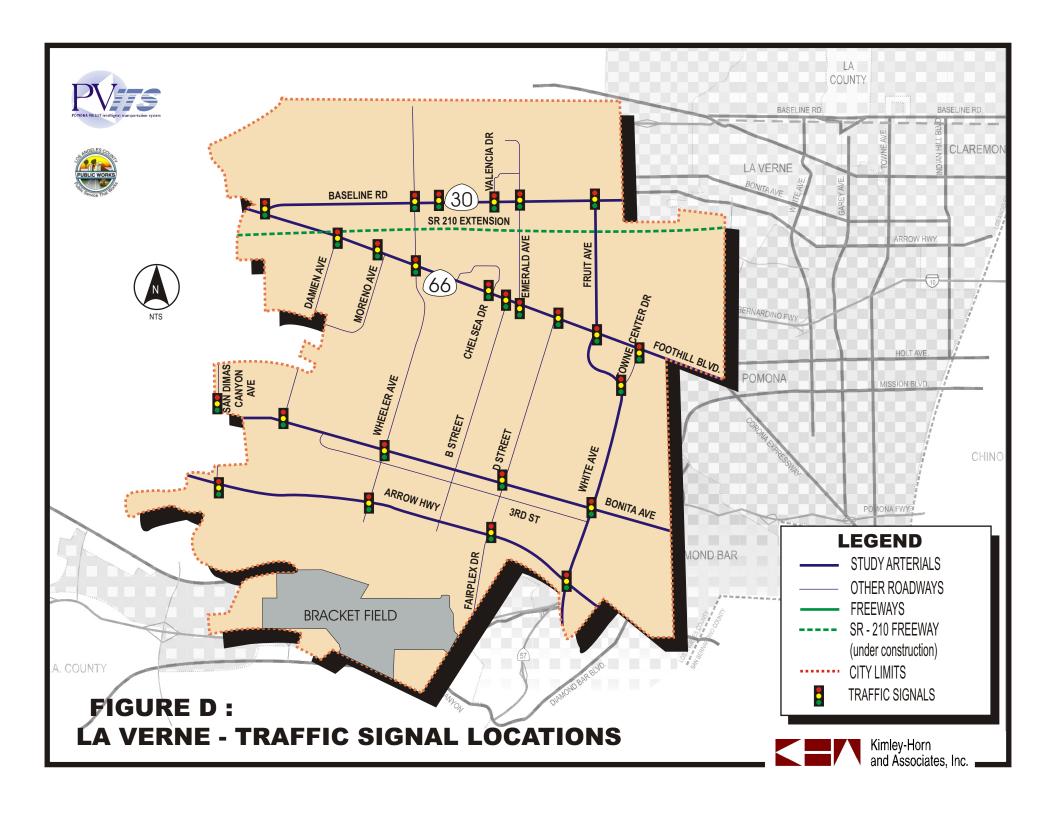
Figure H: Traffic Signals included in Los Angeles County TSSP

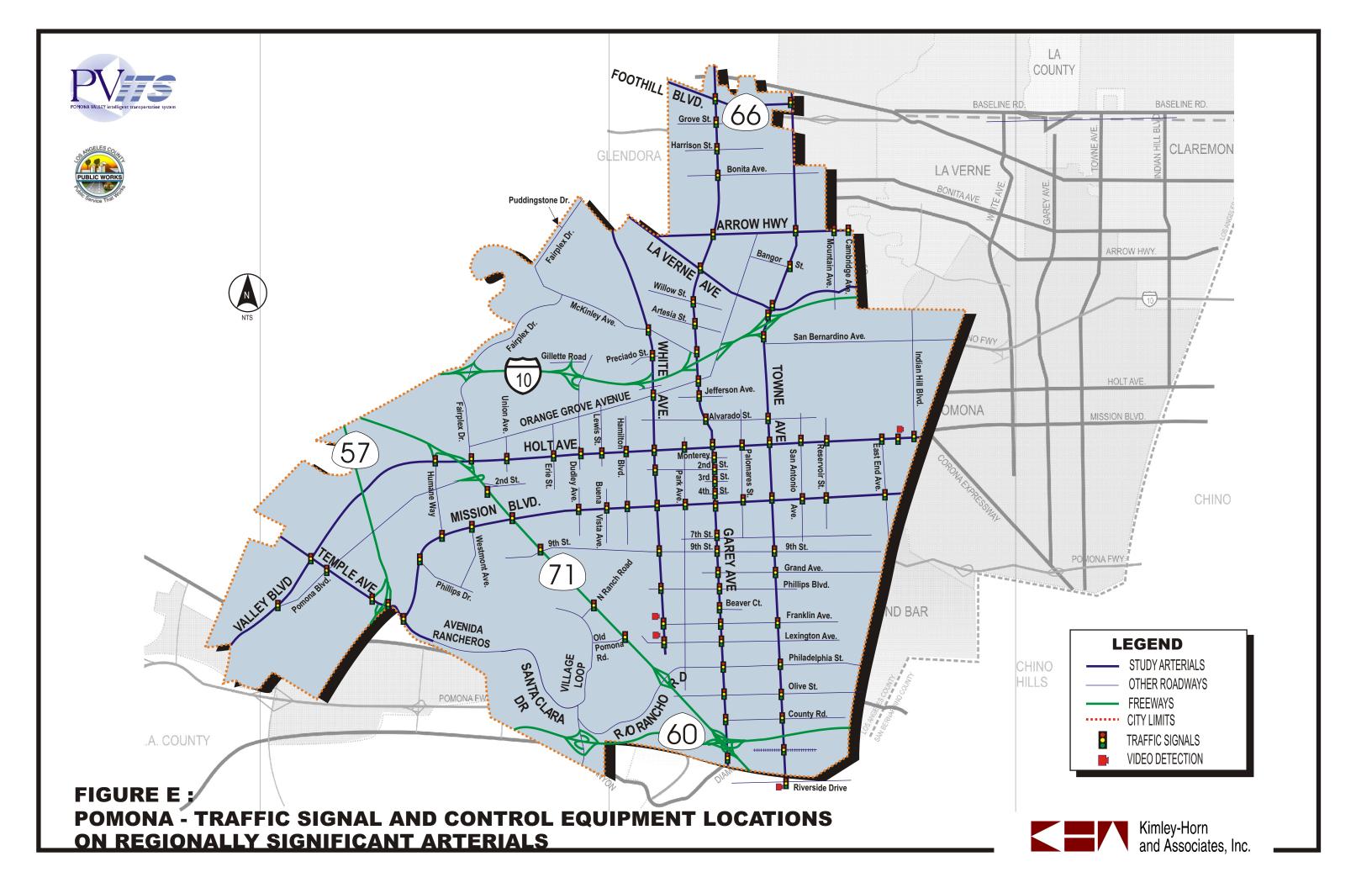
Figure I: Phased Programs of Los Angeles County TSSP

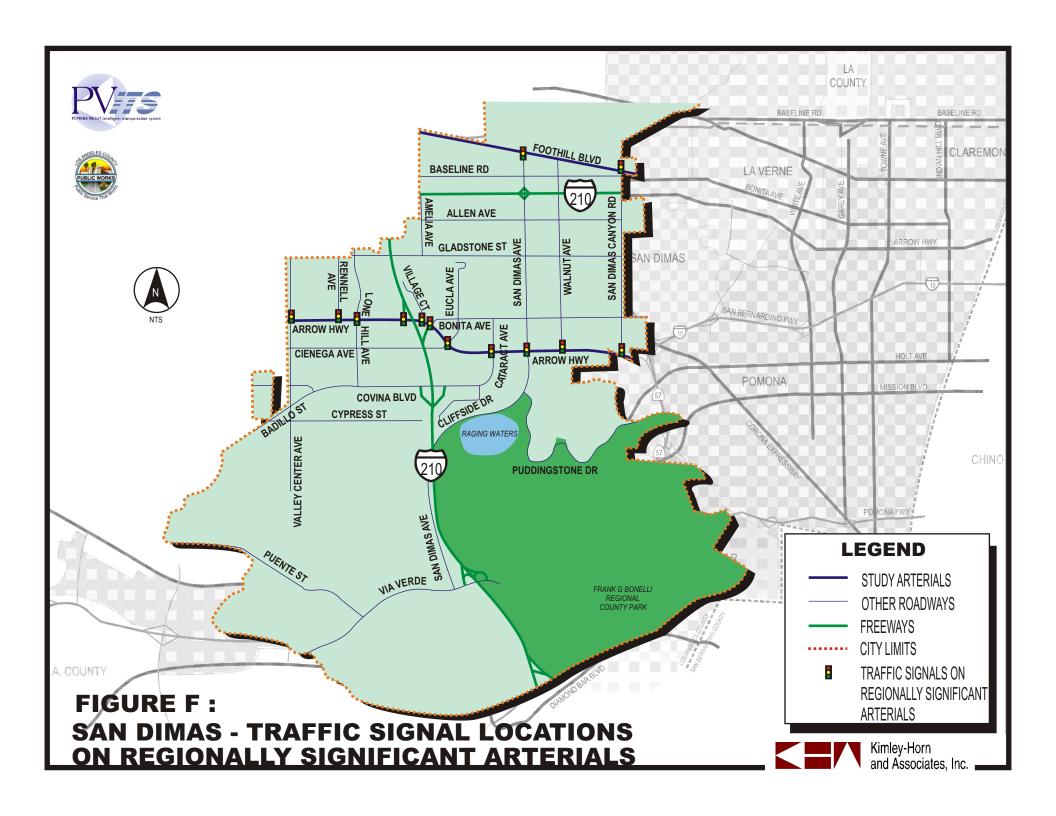


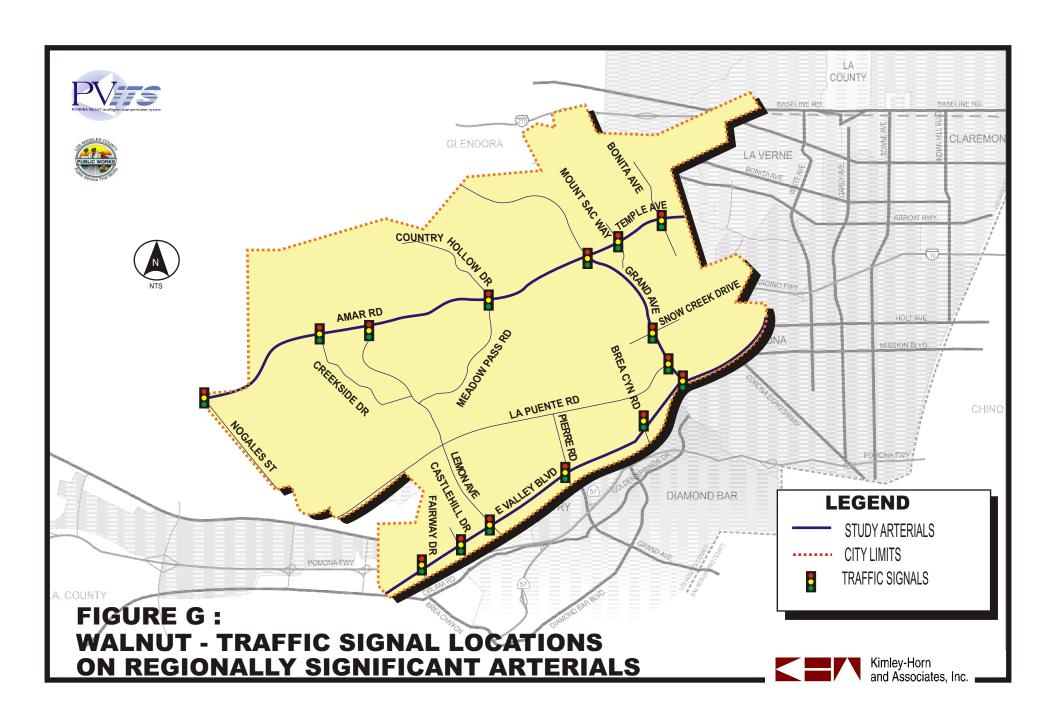


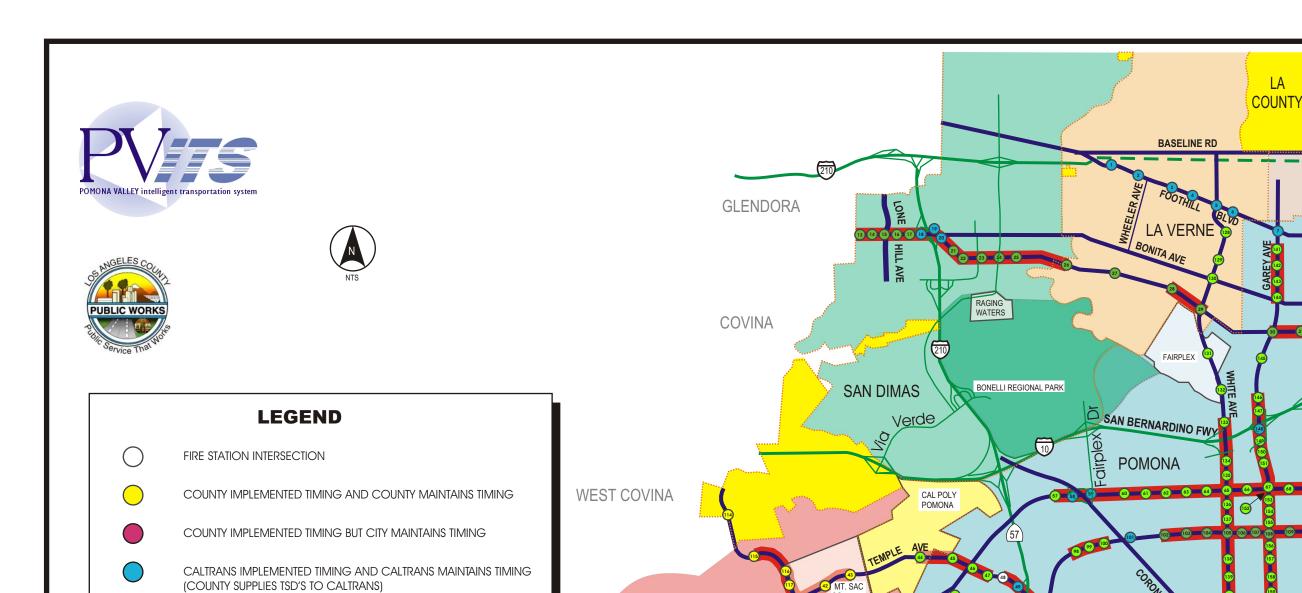










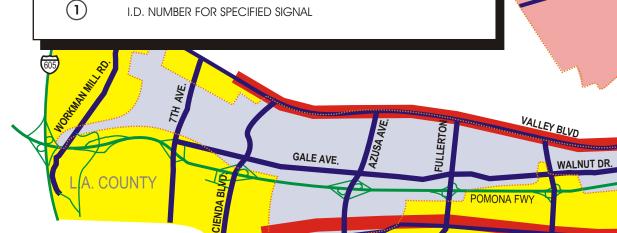


NOGALES ST.[≯]

WALNUT

INDUSTRY

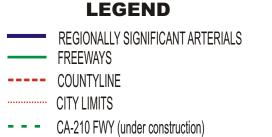
PATHFINDER



CITY IMPLEMENTED TIMING AND CITY MAINTAINS TIMING

COORDINATED TRAFFIC SIGNALS

SIGNALIZED INTERSECTIONS
INCLUDED IN LOS ANGELES COUNTY TSSP



BASELINE RD

ARROW HWY

HOLT AVE

MISSION BLVD

POMONA FWY

CHINO

HILLS

DIAMOND BAR

GRAND AVE

CLAREMONT

FIGURE H

Kimley-Horn
and Associates, Inc.

DELIVERABLE 2.2.1

CHINO

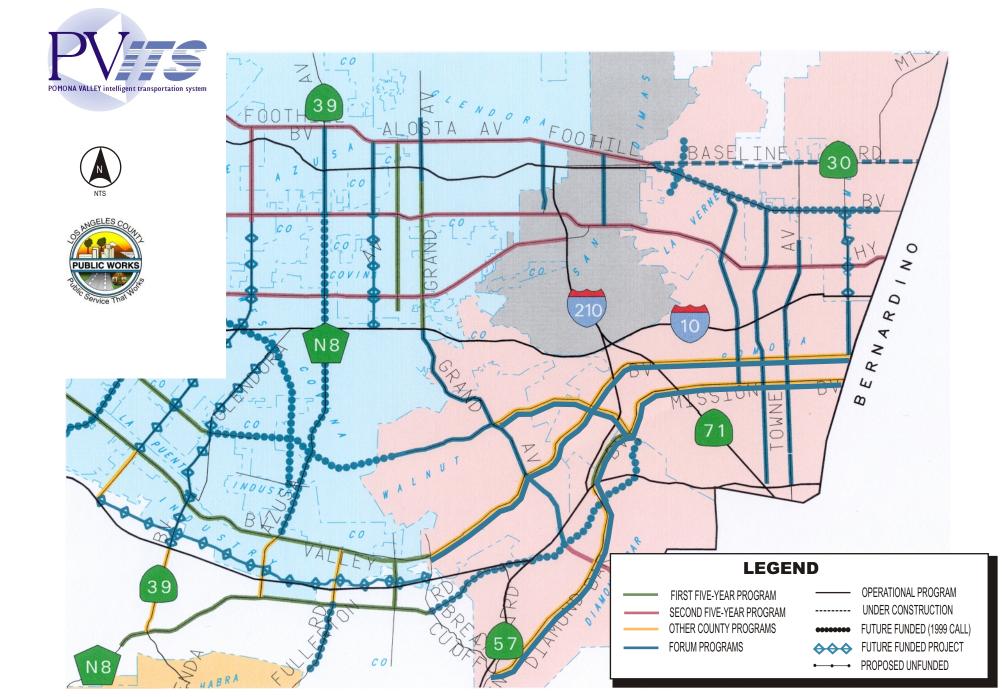


FIGURE I: PHASED PROGRAMS OF LOS ANGELES COUNTY TSSP

Source: Los Angeles County Department of Public Works



Kimley-Horn and Associates, Inc.





Appendix 2 - Los Angeles County Traffic Signal Synchronization Program (TSSP)

	EXISTING COORDINATED TRAFFIC SIGNALS ON REGIONALLY SIGNIFICANT ARTERIALS			
ID, Fig. H	Signalized Intersection	Timing Implemented By	Timing Maintained By	
1	Foothill Blvd. / Damien Ave.	Caltrans	Caltrans	
2	Foothill Blvd. / Wheeler Ave.	Caltrans	Caltrans	
3	Foothill Blvd. / Emerald Ave.	Caltrans	Caltrans	
4	Foothill Blvd. / D St.	Caltrans	Caltrans	
5	Foothill Blvd. / Fruit St.	Caltrans	Caltrans	
6	Foothill Blvd. / Towne Ctr Dr.	Caltrans	Caltrans	
7	Foothill Blvd. / Garey Ave.	Caltrans	Caltrans	
8	Foothill Blvd. / Towne Ave.	Caltrans	Caltrans	
9	Foothill Blvd. / Mountain Ave.	Caltrans	Caltrans	
10	Foothill Blvd. / Indian Hill Blvd	Caltrans	Caltrans	
11	Foothill Blvd. / Mills Ave.	Caltrans	Caltrans	
12	Foothill Blvd. / Claremont Blvd.	Caltrans	Caltrans	
13	Arrow Hwy. / Valley Ctr. Ave.	County	San Dimas	
14	Arrow Hwy. / Rennel Ave.	County	San Dimas	
15	Arrow Hwy. / Lonehill Ave.	County	San Dimas	
16	Arrow Hwy. / Ralph Dwy.	County	San Dimas	
17	Arrow Hwy. / Maimone Ave.	County	San Dimas	
18	Arrow Hwy. / 210 EB Fwy Ramp/Target Dwy	Caltrans	Caltrans	
19	Arrow Hwy. / Village Ct.	Caltrans	Caltrans	
20	Arrow Hwy. / 210 WB Fwy Ramp/Bonita Ave.	Caltrans	Caltrans	
21	Arrow Hwy. / San Dimas Station Dwy.	County	San Dimas	
22	Arrow Hwy. / Eucla Ave.	County	San Dimas	
23	Arrow Hwy. / Cataract Ave.	County	San Dimas	
24	Arrow Hwy. / San Dimas Ave.	County	San Dimas	
25	Arrow Hwy. / Walnut Ave.	County	San Dimas	
26	Arrow Hwy. / San Dimas Cyn. Rd.	County	La Verne	
27	Arrow Hwy. / Wheeler Ave.	County	La Verne	
28	Arrow Hwy. / Fairplex Dr.	County	La Verne	
29	Arrow Hwy. / White Ave.	County	La Verne	
30	Arrow Hwy. / Garey Ave.	County	Pomona	
31	Arrow Hwy. / Orange Grove Ave.	County	Pomona	
32	Arrow Hwy. / Towne Ave.	County	Pomona	
33	Arrow Hwy. / Cambridge Ave.	County	Pomona/Claremont	
34	Arrow Hwy. / Indian Hill Blvd	County	Claremont	
35	Arrow Hwy. / College Ave.	County	Claremont	
36	Arrow Hwy. / Claremont Blvd.	County	Claremont	
37	Amar Rd. / Creekside Dr.	County	County	
38	Amar Rd. / Lemon Ave.	County	County	
39	Amar Rd. / Country Hollow	County	County	

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ADDENDUM – 1995 POMONA VALLEY FORUM SIGNAL SYNCHRONIZATION STUDY





	EXISTING COORDINATED TRAFFIC SIGNALS ON REGIONALLY SIGNIFICANT ARTERIALS (Continued)			
ID, Fig. H	Signalized Intersection	Timing Implemented By	Timing Maintained By	
40	Amar Rd. / Sunset Bluff Rd.	County	County	
41	Amar Rd. / Grand Ave.	County	County	
42	Temple Ave. / Mt Sac Way	County	County	
43	Temple Ave. / Bonita Dr.	County	County	
44	Temple Ave. / University Dr.	County	Walnut	
45	Temple Ave. / Campus Dr.	County	Pomona	
46	Temple Ave. / Campus Dr. Temple Ave. / Valley Blvd.	County	Pomona	
47	*	County	Pomona	
48	Temple Ave. / Pomona Blvd.			
49	Temple Ave. / Fire Station	County	Pomona	
50	Temple Ave. / 57 Fwy SB Ramp	Caltrans	Caltrans	
	Temple Ave. / 57 Fwy WB Ramp	Caltrans	Caltrans	
51	Temple Ave. / Mission Blvd.	County	Pomona	
52	Valley Blod. / Lemon Ave.	County	County	
53	Valley Blvd. / Pierre Rd.	County	County	
54	Valley Blvd. / Brea Cyn Rd.	County	County	
55	Valley Blvd. / Grand Ave.	County	County	
56	Valley Blvd. / Pomona Blvd.	County	San Dimas	
57	Valley Blvd. / Ridgeway St.	County	Pomona	
58	Holt Ave. / 71 Expwy	Caltrans	Caltrans	
59	Holt Ave. / Fairplex Dr.	Caltrans	Caltrans	
60	Holt Ave. / Union Ave.	County	Pomona	
61	Holt Ave. / Erie St.	County	Pomona	
62	Holt Ave. / Dudley St.	County	Pomona	
63	Holt Ave. / Lewis St.	County	Pomona	
64	Holt Ave. / Hamilton Blvd.	County	Pomona	
65	Holt Ave. / White Ave.	County	Pomona	
66	Holt Ave. / Park Ave.	County	Pomona	
67	Holt Ave. / Garey Ave.	County	Pomona	
68	Holt Ave. / Palomares St.	County	Pomona	
69	Holt Ave. / Towne Ave.	County	Pomona	
70	Holt Ave. / San Antonio Ave.	County	Pomona	
71	Holt Ave. / Reservoir St.	County	Pomona	
72	Holt Ave. / East End Ave.	County	Pomona	
73	Holt Ave. / Indian Hill Blvd.	County	Pomona	
74	Holt Ave. / Mills Ave.	County	Pomona	
75	Golden Springs Dr. / Grand Ave.	County	Diamond Bar	
76	Golden Springs Dr. / Golden Prados Dr.	County	Diamond Bar	
77	Golden Springs Dr. / Diamond Bar Blvd.	County	Diamond Bar	
78	Golden Springs Dr. / Ballena Dr.	County	Diamond Bar	
79	Golden Springs Dr. / Carpio Dr.	County	Diamond Bar	
80	Diamond Bar Blvd. / Brea Cyn Rd.	County	Diamond Bar	
81	Diamond Bar Blvd. / Cold Spring Ln.	County	Diamond Bar	
82	Diamond Bar Blvd. / Sugarpine Pl.	County	Diamond Bar	

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	EXISTING COORDINATED TRAFFIC SIGNALS ON REGIONALLY SIGNIFICANT ARTERIALS (Continued)			
ID, Fig.18		Timing Implemented	Timing Maintained	
00	Signalized Intersection	By	By	
83	Diamond Bar Blvd. / Fountain Springs Rd.	County	Diamond Bar	
84	Diamond Bar Blvd. / Shadow Cyn Dr.	County	Diamond Bar	
85	Diamond Bar Blvd. / Pathfinder Rd.	County	Diamond Bar	
86	Diamond Bar Blvd. / Kiowa Crest Dr.	County	Diamond Bar	
87	Diamond Bar Blvd. / Mountain Laurel Way	County	Diamond Bar	
88	Diamond Bar Blvd. / Quail Summit Dr.	County	Diamond Bar	
89	Diamond Bar Blvd. / Montefino Ave.	County	Diamond Bar	
90	Diamond Bar Blvd. / Grand Ave.	County	Diamond Bar	
91	Diamond Bar Blvd. / Gold Rush Dr.	County	Diamond Bar	
92	Diamond Bar Blvd. / Shopping Ctr Dwy.	County	Diamond Bar	
93	Diamond Bar Blvd. / Palomino Dr.	County	Diamond Bar	
94	Diamond Bar Blvd. / 60 EB Fwy Ramp	Caltrans	Caltrans	
95	Diamond Bar Blvd. / 60 WB Fwy Ramp	Caltrans	Caltrans	
96	Diamond Bar Blvd. / Sunset Crossing Rd.	County	Diamond Bar	
97	Diamond Bar Blvd. / Highland Valley	County	Diamond Bar/San Dimas	
98	Mission Blvd. / Phillips Dr.	County	Pomona	
99	Mission Blvd. / Humane Way	County	Pomona	
100	Mission Blvd. / Westmont Ave.	County	Pomona	
101	Mission Blvd. / 71 Expwy Ramps	Caltrans	Pomona	
102	Mission Blvd. / Dudley St.	County	Pomona	
103	Mission Blvd. / Buena Vista Ave.	County	Pomona	
104	Mission Blvd. / Hamilton Blvd.	County	Pomona	
105	Mission Blvd. / White Ave.	County	Pomona	
106	Mission Blvd. / Park Ave.	County	Pomona	
107	Mission Blvd. / Main St.	County	Pomona	
108	Mission Blvd. / Garey Ave.	County	Pomona	
109	Mission Blvd. / Palomares St.	County	Pomona	
110	Mission Blvd. / Towne Ave.	County	Pomona	
111	Mission Blvd. / San Antonio Ave.	County	Pomona	
112	Mission Blvd. / Reservoir St.	County	Pomona	
113	Mission Blvd. / East End Ave.	County	Pomona	
114	Grand Ave. / Cameron Ave.	County	County	
115	Grand Ave. / Shadow Mtn Dr.	County	County	
116	Grand Ave. / Mountaineer Blvd.	County	County	
117	Grand Ave. / San Jose Hills Rd.	County	County	
118	Grand Ave. / Snow Creek Dr.	County	County	
119	Grand Ave. / La Puente Rd.	County	County	
120	Grand Ave. / 57 SB Fwy Ramp	Caltrans	Caltrans	
121	Grand Ave. / 57 NB Fwy Ramp	Caltrans	Caltrans	
122	Grand Ave. / Apartment Dwy.	County	Diamond Bar	
123	Grand Ave. / Montefino Ave.	County	Diamond Bar	
124	Grand Ave. / Rolling Knoll Rd.	County	Diamond Bar	





	EXISTING COORDINATED TRAFFIC SIGNALS ON REGIONALLY SIGNIFICANT ARTERIALS (Continued)			
ID, Fig. H	Signalized Intersection	Timing Implemented By	Timing Maintained By	
125	Grand Ave. / Shotgun Ln.	County	Diamond Bar	
126	Grand Ave. / Summitridge Dr.	County	Diamond Bar	
127	Grand Ave. / Longview Dr.	County	Diamond Bar	
128	White Ave. / Towne Ctr Dr.	County	La Verne	
129	White Ave. / Eighth St.	County	La Verne	
130	White Ave. / Bonita Ave.	County	La Verne	
131	White Ave. / Gate 5/Gate 8	County	Pomona	
132	White Ave. / McKinley Ave.	County	Pomona	
133	White Ave. / Preciado St.	County	Pomona	
134	White Ave. / Orange Grove Ave.	County	Pomona	
135	White Ave. / Fire Station Dwy.	County	Pomona	
136	White Ave. / Monterey Ave.	County	Pomona	
137	White Ave. / 2 nd St.	County	Pomona	
138	White Ave. / 9 th St.	County	Pomona	
139	White Ave. / Grand Ave.	County	Pomona	
140	White Ave. / Phillips Blvd.	County	Pomona	
141	Garey Ave. / Drake St.	County	Pomona	
142	Garey Ave. / Grove St.	County	Pomona	
143	Garey Ave. / Harrison Ave.	County	Pomona	
144	Garey Ave. / Bonita Ave.	County	Pomona	
145	Garey Ave. / La Verne Ave.	County	Pomona	
146	Garey Ave. / Willow St.	County	Pomona	
147	Garey Ave. / Artesia St.	County	Pomona	
148	Garey Ave. / McKinley Ave.	Caltrans	Caltrans	
149	Garey Ave. / Orange Grove Ave.	County	Pomona	
150	Garey Ave. / Jefferson Ave.	County	Pomona	
151	Garey Ave. / Alvarado St.	County	Pomona	
152	Garey Ave. / Monterey Ave.	County	Pomona	
153	Garey Ave. / 2 nd St.	County	Pomona	
154	Garey Ave. / 3 rd St.	County	Pomona	
155	Garey Ave. / 4 th St.	County	Pomona	
156	Garey Ave. / 7 th St.	County	Pomona	
157	Garey Ave. / 9 th St.	County	Pomona	
158	Garey Ave. / Grand Ave.	County	Pomona	
159	Garey Ave. / Phillips Blvd.	County	Pomona	
160	Garey Ave. / Beaver Ct.	County	Pomona	
161	Garey Ave. / Franklin Ave.	County	Pomona	
162	Garey Ave. / Lexington Ave.	County	Pomona	
163	Garey Ave. / Philadelphia St.	County	Pomona	
164	Garey Ave. / Olive St.	County	Pomona	
165	Garey Ave. / County Rd.	County	Pomona	
166	Garey Ave. / 71 Exwy.	Caltrans	Caltrans	
167	Towne Ave. / Richbrook Dr.	County	Claremont	





	EXISTING COORDINATED TRAFFIC SIGNALS ON REGIONALLY SIGNIFICANT ARTERIALS (Continued)			
ID, Fig. H	Signalized Intersection	Timing Implemented By	Timing Maintained By	
168	Towne Ave. / Harrison Ave.	County	Pomona/Claremont	
169	Towne Ave. / Bonita Ave.	County	Pomona/Claremont	
170	Towne Ave. / San Antonio Ave.	County	Pomona	
171	Towne Ave. / Bangor St.	County	Pomona	
172	Towne Ave. / La Verne Ave.	County	Pomona	
173	Towne Ave. / 10 WB Fwy Ramp	Caltrans	Caltrans	
174	Towne Ave. / 10 EB Fwy Ramp	Caltrans	Caltrans	
175	Towne Ave. / San Bernardino Ave.	County	Pomona	
176	Towne Ave. / Lincoln Ave.	County	Pomona	
177	Towne Ave. / Alvarado St.	County	Pomona	
178	Towne Ave. / Monterey Ave.	County	Pomona	
179	Towne Ave. / 2 nd St.	County	Pomona	
180	Towne Ave. / 3 rd St.	County	Pomona	
181	Towne Ave. / 9 th St.	County	Pomona	
182	Towne Ave. / Grand Ave.	County	Pomona	
183	Towne Ave. / Phillips Blvd.	County	Pomona	
184	Towne Ave. / Alcott Ave.	County	Pomona	
185	Towne Ave. / Franklin Ave.	County	Pomona	
186	Towne Ave. / Lexington Ave.	County	Pomona	
187	Towne Ave. / Philadelphia St.	County	Pomona	
188	Towne Ave. / Olive St.	County	Pomona	
189	Towne Ave. / County Rd.	County	Pomona	
190	Indian Hill Blvd. / Claremont High	City	City	
191	Indian Hill Blvd. / Eight St.	Caltrans	Caltrans	
192	Indian Hill Blvd. / Harrison Ave.	City	City	
193	Indian Hill Blvd. / Bonita Ave.	City	City	
194	Indian Hill Blvd. / First St.	City	City	
195	Indian Hill Blvd. / Oak Park Dr.	City	City	
196	Indian Hill Blvd. / San Jose Ave.	City	City	
197	Indian Hill Blvd. / 10 WB Fwy Ramp	Caltrans	Caltrans	
198	Indian Hill Blvd. / 10 WB Fwy Ramp	Caltrans	Caltrans	
199	Indian Hill Blvd. / Claremont Center	City	City	
200	Indian Hill Blvd. / American Ave.	City	City	
201	Indian Hill Blvd. / Gateway Center Dr.	County	City	
202	Indian Hill Blvd. / San Bernardino Ave.	County	City	
203	Indian Hill Blvd. / Lincoln Ave.	County	City	
204	Indian Hill Blvd. / Kingsley Ave.	County	City	





Appendix 3 - Traffic Signal Equipment – By Agency

TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN CLAREMONT		
Signalized Intersection	Phases	Ownership
Arrow Highway / Mountain Avenue	2	Claremont/Pomona
Arrow Highway / Indian Hill Blvd.	8	Claremont
Arrow Highway / Cambridge Avenue	2	Claremont/Pomona
Arrow Highway / College Avenue	2	Claremont
Arrow Highway / Mills Avenue	3	Claremont
Baseline Road / Towne Avenue	5	Caltrans
Baseline Road / Mountain Avenue	4	Caltrans
Baseline Road / Indian Hill Blvd.	4	Caltrans
Baseline Road / Mills Avenue	4	Caltrans
Baseline Road / Monte Vista Avenue	6	Caltrans
Foothill Blvd. / Dartmouth Avenue	2	Caltrans
Foothill Blvd. / Towne Avenue	4	Caltrans
Foothill Blvd. / Mountain Avenue	4	Caltrans
Foothill Blvd. / Indian Hill Blvd.	8	Caltrans
Foothill Blvd. / Mills Avenue	4	Caltrans
Foothill Blvd. / Claremont Blvd.	8	Caltrans
Indian Hill Blvd./ American Avenue	4	Claremont/Pomona
Indian Hill Blvd./ Eastbound I-10 Ramps	4	Caltrans
Indian Hill Blvd./ Westbound I-10 Ramps	4	Caltrans
Indian Hill Blvd./ San Jose Avenue	6	Claremont
Indian Hill Blvd./ 1st Street	6	Claremont
Indian Hill Blvd./ Bonita Avenue	6	Claremont
Indian Hill Blvd./ Harrison Avenue	4	Claremont
Indian Hill Blvd./ Claremont High School	4	Claremont
Indian Hill Blvd. / 2 nd St.	N/A	[Planned]
NOTE: All current and planned signal equipment utilizes Type-170 controllers.		





TRAFFIC SIGNAL EQUIPMENT			
ON REGIONAL ARTERIALS WITHIN DIAMOND BAR			
Signalized Intersection	Phases	Ownership	
Brea Canyon Road. / Diamond Bar Blvd.	8	Diamond Bar	
Brea Canyon Road / Golden Springs Drive	8	Diamond Bar	
Brea Canyon Road / Lycoming Street	3	Diamond Bar	
Brea Canyon Road / Washington Street	3	Diamond Bar	
Diamond Bar Blvd. / K-Mart Center	5	Diamond Bar	
Diamond Bar Blvd. / Cold Springs Lane	3	Diamond Bar	
Diamond Bar Blvd./ Crestview Drive	3	Diamond Bar	
Diamond Bar Blvd. / SR 60 eastbound ramps	3	Caltrans	
Diamond Bar Blvd. / SR 60 westbound ramps	3	Caltrans	
Diamond Bar Blvd. / Golden Springs Drive	8	Diamond Bar	
Diamond Bar Blvd / Highland Valley	2	Diamond Bar	
Diamond Bar Blvd. / Kiowa Crest Drive	3	Diamond Bar	
Diamond Bar Blvd. / Mountain Laurel Way	3	Diamond Bar	
Diamond Bar Blvd. / Pathfinder Road	3	Diamond Bar	
Diamond Bar Blvd / Sugarpine (private)	4	Diamond Bar	
Diamond Bar Blvd / CA 57 southbound off-ramp	8	Caltrans	
Diamond Bar Blvd. / Sunset Crossing Road	2	Diamond Bar	
Diamond Bar Blvd. / Temple Ave. / Mission Blvd.	8	Diamond Bar/Pomona	
Gateway Center/Valley Vista	4	Diamond Bar	
Gateway Center/Bridgegate (Lot 16)	3	Diamond Bar	
Golden Springs / Calbourne Drive	6	Diamond Bar	
Golden Springs / Lemon Avenue	6	Diamond Bar	
Golden Springs / Gateway Center Drive	4	Diamond Bar	
Golden Springs / SR 60 eastbound ramps	6	Caltrans/Diamond Bar	
Golden Springs / Ballena Drive	2	Diamond Bar	
Golden Springs / Carpio	3	Diamond Bar	
Golden Springs / Copley Drive	4	Diamond Bar	
Golden Springs / Grand Avenue	8	Diamond Bar	
Golden Spring / Sunset Crossing Road	3	Diamond Bar	
Golden Springs / Temple Avenue	3	Diamond Bar	
Grand Avenue / Diamond Bar Blvd.	8	Diamond Bar	
Grand Avenue / Golden Springs Drive	8	Diamond Bar	
Grand Avenue / Longview Drive	6	Diamond Bar	
Grand Avenue / Montefino Avenue	4	Diamond Bar	
Grand Avenue / Rolling Knoll Road	3	Diamond Bar	
Grand Avenue / Shotgun Lane	3	Diamond Bar	
Grand Avenue / Summitridge Drive	6	Diamond Bar	
Grand Avenue / SR 57 north & SR 60 east ramps	4	Caltrans	
Grand Avenue / SR 57 south & SR 60 west ramps	6	Caltrans	
Lemon Avenue / Golden Springs Drive	2	Diamond Bar	
Pathfinder Road / Brea Canyon Road (W)	6	Diamond Bar	
Pathfinder Road / Brea Canyon Rd. / Fern Hollow	4	Diamond Bar	
Brea Canyon Road / SR 60 westbound ramps	4	Caltrans	
-	<u>'</u>	Cuttuno	
* New signals - Phasing Information not Available.			





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN DIAMOND BAR (Continued)			
Pathfinder Road / Evergreen Springs Drive	3	Diamond Bar	
Pathfinder Road / SR 57 northbound ramps	2	Caltrans	
Pathfinder Road / SR 57 southbound ramps	3	Caltrans	
Diamond Bar Blvd. / Silver Hawk Drive	N/A	[Planned]	
Diamond Bar Blvd. / Clear Creek Canyon Drive	N/A	[Planned]	
Diamond Bar Blvd. / SR 57 northbound ramps (north of Sunset Crossing Road)	N/A	[Planned]	
Golden Springs Road / Sylvan Glen Road	N/A	[Planned]	





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN INDUSTRY			
Signalized Intersection	Phases	Ownership	
7 th Avenue /Clark Avenue	4	Industry/L.A. County	
7 th Avenue / Don Julian Road	2	Industry	
7 th Avenue /Proctor Avenue	4	Industry/L.A. County	
7 th Avenue /Salt Lake Avenue	4-	Industry	
Azusa Avenue / 60 Fwy. Westbound ramps	4	Caltrans	
Azusa Avenue / 60 Fwy. Eastbound ramps	4	Caltrans	
Azusa Avenue / Anaheim and Puente Road	4	Industry	
Azusa Avenue / Gale Avenue	6	Industry	
Azusa Avenue / Hurley Street	4	Industry	
Azusa Avenue / Pepperbrook Way	5	Industry/L.A. County	
Azusa Avenue / Railroad Street	5	Industry	
Brea Canyon Road / 60 Fwy. Westbound ramps	4	Caltrans	
Brea Canyon Road / Currier Road	6	Industry/L.A. County	
Colima Road / Albatross Road	6	Industry/L.A. County	
Colima Road / Azusa Avenue	6	Industry/L.A. County	
Colima Road / Stoner Creek Road	2	Industry	
Colima Road / Walnut Hall Road	3	Industry	
Fairway Road / 60 Fwy. Westbound ramps	4	Caltrans	
Fairway Road / 60 Fwy. Eastbound ramps	4	Caltrans	
Fairway Road / Business Parkway	5	Industry/L.A. County	
Fairway Road / North Walnut Drive	5	Industry	
Fairway Road / South Walnut Drive	3	Industry/L.A. County	
Fullerton Road / 60 Fwy. Westbound ramps	4	Caltrans	
Fullerton Road / 60 Fwy. Eastbound ramps	4	Caltrans	
Fullerton Road / Railroad Street	4	Industry	
Fullerton Road / Rowland Street	3	Industry	
Gale Avenue / (East of) Angelcrest Drive	4	Industry/L.A. County	
Gale Avenue / (East of) Stoner Creek Road	5	Industry	
Gale Avenue / Bixby Drive	2	Industry	
Gale Avenue / Coiner Court	3	Industry/L.A. County	
Gale Avenue / Evergreen Place	4	Industry	
Gale Avenue / Fullerton Boulevard	4	Industry	
Gale Avenue / Fullerton Blvd. Center	2	Industry	
Gale Avenue / Green Drive	6	Industry	
Gale Avenue / Hatcher Avenue	4	Industry	
Gale Avenue / Kwis Avenue	4	Industry/L.A. County	
Gale Avenue / Costco Shopping Center	4	Industry	
Gale Avenue / Seventh Street	2	Caltrans	
Gale Avenue / Stimson Avenue **	2	Industry/L.A. County	
Gale Avenue / Stoner Creek Road **	2	Industry	
Gale Avenue / Turnbull Canyon Road	2	Industry/L.A. County	
Grand Avenue / 57 south & 60 west ramps	4	Caltrans	
Grand Avenue / 57 north & 60 east ramps	4	Caltrans	
Hacienda Boulevard / 60 Fwy ramp	4	Caltrans	

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ADDENDUM – 1995 POMONA VALLEY FORUM





TRAFFIC SIGNAL EQUIPMENT				
ON REGIONAL ARTERIALS WITHIN INDUSTRY (Continued)				
Hacienda Boulevard / Gale Avenue	6	L.A. County		
Hacienda Boulevard / Don Julian Road	6	Industry		
Hacienda Boulevard / Nelson Avenue	5	Industry/La Puente		
Hacienda Boulevard / Stafford Street **	5	Industry		
Lemon Avenue / Business Parkway / Currier Road	4	Industry		
Nogales Street / Arenth Avenue **	2	Industry		
Nogales Street / 60 Fwy. Eastbound ramps	4	Caltrans		
Nogales Street / Gale Avenue / Walnut Drive	-8	Industry/L.A. County		
Nogales Street / La Puente Road	-4	L.A. County/West Covina		
Nogales Street / San Jose Avenue ***	2	Industry/L.A. County		
Nogales Street / 60 Fwy. Westbound ramps	4	Caltrans		
Valley Boulevard / Azusa Way	6	Industry/La Puente		
Valley Boulevard / Brea Canyon Road	3	Industry/Walnut/L.A. County		
Valley Boulevard / Covina Boulevard	-2	L.A. County		
Valley Boulevard / California Avenue	6	Industry/L.A. County		
Valley Boulevard / Giano Avenue	-3	Industry		
Valley Boulevard / Fairway Drive	6	Industry/Walnut		
Valley Boulevard / Ferrero Lane	-4	Industry/La Puente		
Valley Boulevard / Fullerton Road	6	Industry/L.A. County		
Valley Boulevard / Giano Avenue	3	Industry		
•	8	Industry/Walnut/L.A.		
Valley Boulevard / Grand Avenue	٥	County		
Valley Boulevard / Hacienda Boulevard	8	Industry		
Valley Boulevard / Hambledon Avenue	8	Industry		
Valley Boulevard / Hurley Street	4	Industry		
Valley Boulevard / La Seda Road	-4	Industry/L.A. County		
Valley Boulevard / Lemon Avenue	2	Industry/Walnut/L.A.		
valley Boulevard / Lemon Avenue		County		
Valley Boulevard / Nogales Street	8	Industry/West Covina		
Valley Boulevard / Orange Avenue	6	Industry/L.A. County		
Valley Boulevard / Proctor Avenue	5	Industry		
Valley Boulevard / San Angelo Avenue	-2	Industry/L.A. County		
Valley Boulevard /Stimson Avenue	5	Industry		
Valley Boulevard / Sunset Avenue-7 th Avenue	8	Industry/L.A. County		
Valley Boulevard / Turnbull Canyon Road	3	Industry/L.A. County		
Valley Boulevard / Wickford Avenue	-3	Industry & La Puente		
Valley Boulevard / Workman Mill Road / Puente Avenue	-8	Industry/L.A. County		
Valley Boulevard / 2 nd Avenue / Vineland Avenue	6	Industry/L.A. County		
Valley Boulevard /Yorbita Road	-6	Industry/L.A. County		

All controllers in this Table are Type-170, unless noted with asterisks:

^{**} Signal SST controller

^{***} Signal utilizes EC controller

⁻ Phasing information for this intersection was not determined at the time this report was prepared.





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN LA VERNE			
Signalized Intersection	Controller	Phases	Ownership
Arrow Hwy / D St. / Fairplex Drive	390	8	La Verne
Arrow Hwy / San Dimas Canyon	390	8	La Verne/San Dimas
Arrow Hwy / Wheeler Avenue	390	8	La Verne
Arrow Hwy / White Street	390	8	La Verne
Baseline Road / Emerald Avenue	170	6	Caltrans
Baseline Road / Foothill Blvd.	170	6	Caltrans
Baseline Road / Fruit Street	170	4	Caltrans
Baseline Road / Via Rancho	170	4	Caltrans
Baseline Road / Wheeler Avenue	170	4	Caltrans
Baseline Road / Esperanza Road	170	6	Caltrans
Bonita Avenue / D Street	ACS-2-2100	8	La Verne
Bonita Avenue / Damien Avenue	ACS-2-2100	8	La Verne
Bonita Avenue / San Dimas Canyon	170	8	San Dimas/La Verne
Bonita Avenue / Wheeler Avenue	820	8	La Verne
Bonita Avenue / White Street	ACS-2-2100	8	La Verne
Foothill Blvd./ Chelsea Avenue	170	5	Caltrans
Foothill Blvd./ B Street	170	6	Caltrans
Foothill Blvd./ D Street	170	6	Caltrans
Foothill Blvd./ Damien Ave.	170	4	Caltrans
Foothill Blvd. / Emerald Avenue	170	6	Caltrans
Foothill Blvd./ Wheeler Avenue	170	8	Caltrans
Foothill Blvd./ White Street	170	8	Caltrans
Foothill Blvd. / Moreno Drive	170	6	Caltrans
Foothill Blvd. / Towne Center Dr.	170	6	Caltrans
White Ave. / Towne Center Drive	170	3	La Verne





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN POMONA		
Signalized Intersection	Phases	Ownership
SR 71 Expressway / 2 nd Street	6	Caltrans
SR 71 Expressway / 9 th Street	6	Caltrans
SR 71 Expressway / Mission Blvd.	8	Caltrans
SR 71 Expressway / North Ranch Road	6	Caltrans
SR 71 Expressway / Old Pomona Road	6	Caltrans
Arrow Highway / Cambridge Avenue	2	Pomona/Claremont
Arrow Highway / Garey Avenue	2	Pomona
Arrow Highway / Mountain Avenue	2	Pomona/Claremont
Arrow Highway / Towne Avenue	4	Pomona
Foothill Boulevard / Garey Avenue	6	Caltrans
Foothill Boulevard / Towne Avenue	8	Caltrans
Garey Avenue / I-10 Eastbound Ramps	6	Caltrans
Garey Avenue / SR-60 Ramps	4	Caltrans
Garey Avenue / 2 nd Street	8	Pomona
Garey Avenue / 3 rd Street	2	Pomona
Garey Avenue / 4 th Street	2	Pomona
Garey Avenue / 7 th Street	2	Pomona
Garey Avenue / 9 th Street	2	Pomona
Garey Avenue / Alvarado Street	2	Pomona
Garey Avenue / Arrow Highway	4	Pomona
Garey Avenue / Artesia Street	4	Pomona
Garey Avenue / Beaver Court	2	Pomona
Garey Avenue / Bonita Avenue	5	Pomona
Garey Avenue / County Road	4	Pomona
Garey Avenue / Franklin Avenue	4	Pomona
Garey Avenue / Grand Avenue	8	Pomona
Garey Avenue / Grove Street	4	Pomona
Garey Avenue / Harrison Street	2	Pomona
Garey Avenue / Holt Avenue	4	Pomona
Garey Avenue / Willow Street	4	Pomona
Garey Avenue / Jefferson Avenue	3	Pomona
Garey Avenue / La Verne Avenue	<u>3</u> 5	Pomona
Garey Avenue / Lexington Avenue	2	Pomona
Garey Avenue / McKinley Avenue	4	Caltrans
Garey Avenue / Mission Boulevard	4	Pomona
Garey Avenue / Monterey Avenue	2	Pomona
Garey Avenue / Olive Street	2	Pomona
Garey Avenue / Orange Grove Avenue*	8	Pomona
Garey Avenue / Philadelphia Street/Rio Rancho Road	2	Pomona
Garey Avenue / Willow Street	4	Pomona
Garey Avenue / Phillips Blvd.	6	Pomona
* Type 90 Controller		





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN POMONA (Continued)			
Signalized Intersection	Phases	Ownership	
Holt Avenue / Dudley Street	4	Pomona	
Holt Avenue / East End Avenue	6	Pomona	
Holt Avenue / Erie Street	4	Pomona	
Holt Avenue / Fairplex Drive	6	Pomona	
Holt Avenue / Hamilton Blvd.	4	Pomona	
Holt Avenue / Indian Hill Blvd.	6	Pomona	
Holt Avenue / Lewis Street.	4	Pomona	
Holt Avenue / Palomares Street.	4	Pomona	
Holt Avenue / Park Avenue.	4	Pomona	
Holt Avenue / Reservoir Street	4	Pomona	
Holt Avenue / San Antonio Avenue	4	Pomona	
Holt Avenue / Towne Avenue	4	Pomona	
Holt Avenue / Union Avenue	4	Pomona	
Holt Avenue / White Avenue	8	Pomona	
Holt Ave/SR 71 southbound ramps/Humane Way	4	Caltrans	
Holt Ave/SR 71 northbound ramps/Fairplex Dr.	6	Caltrans	
Mission Blvd. / Buena Vista Avenue	4	Pomona	
Mission Blvd. / Dudley Street	4	Pomona	
Mission Blvd. / Hamilton Blvd.	4	Pomona	
Mission Blvd. / White Avenue	8	Pomona	
Mission Blvd. / Park Avenue	4	Pomona	
Mission Blvd. / Palomares Street	4	Pomona	
Mission Blvd. / Pomona Blvd.	3	Pomona	
Mission Blvd. / Towne Avenue	8	Pomona	
Mission Blvd. / Temple Avenue	8	Pomona/Diamond Bar	
Mission Blvd. / San Antonio Avenue	4	Pomona	
Mission Blvd. / Reservoir Street	4	Pomona	
Mission Blvd. / Westmont Avenue	4	Pomona	
Mission Blvd. / East End Avenue	4	Pomona	
Mission Blvd. / Phillips Boulevard	3	Pomona	
Towne Avenue / Bangor Street	2	Pomona	
Towne Avenue / La Verne Avenue	4	Pomona	
Towne Avenue/10 Fwy W/B Ramps	4	Caltrans	
Temple Avenue / Valley Blvd.	8	Pomona	
Temple Avenue / Pomona Blvd.	6	Pomona	
Temple Avenue / SR 57 southbound ramps	4	Caltrans	
Temple Avenue / SR 57 northbound ramps	2	Caltrans	
Towne Avenue/10 Fwy E/B Ramps	4	Pomona	
Towne Avenue / Alvarado Street	2	Pomona	
Towne Avenue / 9 th Street	4	Pomona	
Towne Avenue / Grand Avenue	4	Pomona	
Towne Avenue / Philadelphia Street	4	Pomona	





TRAFFIC SIGNAL EQUIPMENT			
ON REGIONAL ARTERIALS WITHIN POMONA (Continued)			
Signalized Intersection	Phases	Ownership	
Valley Blvd. / Pomona Blvd.	3	Pomona	
Valley Boulevard / Temple Avenue	4	Pomona	
White Avenue / McKinley Avenue	4	Pomona	
White Avenue / 2 nd Street	4	Pomona	
White Avenue / Preciado Street	4	Pomona	
White Avenue / Orange Grove Avenue	4	Pomona	
White Avenue / Alvarado Street	2	Pomona	
White Avenue / 9 th Street	2	Pomona	
White Avenue / Phillips Boulevard	2	Pomona	
White Avenue / Lexington Avenue	2	Pomona	





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN SAN DIMAS			
Signalized Intersection	Phases	Ownership	
Arrow Highway / Lone Hill Avenue	8	San Dimas	
Arrow Highway / Rennel Avenue	6	San Dimas	
Arrow Highway / San Dimas Avenue	8	San Dimas	
Arrow Highway / San Dimas Canyon	8	San Dimas/La Verne	
Arrow Highway / Village Court	3	San Dimas	
Arrow Highway / Walnut Avenue	8	San Dimas	
Arrow Highway / Eucla Avenue	4	San Dimas	
Arrow Highway / Cataract Avenue/Covina Boulevard	8	San Dimas	
Arrow Highway/Bonita Avenue/I-210 westbound ramps	6	San Dimas/Caltrans	
Arrow Highway / I-210 eastbound ramps	2	Caltrans	
Foothill Boulevard / San Dimas Avenue	3	San Dimas	
Foothill Boulevard / San Dimas Canyon	4	San Dimas	





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN WALNUT			
Signalized Intersection	Phases	Ownership	
Amar Road / County Hallow Drive	3	Walnut	
Amar Road / Creekside Drive	4	Walnut	
Amar Road / Grand Avenue	5	Walnut	
Amar Road / Lemon Avenue	4	Walnut	
Amar Road / Meadow Pass Road	3	Walnut	
Grand Avenue / Shadow Mountain Road	3	Walnut	
Grand Avenue / Snow Creek Drive	3	Walnut	
Lemon Avenue / Paseo Del Prado	-6	Walnut	
Temple Avenue / Bonita Avenue	6	Walnut	
Valley Blvd. / Brea Canyon Road	4	Walnut/Industry/L.A. County	
Valley Blvd. / Camino De Teodor	6	Walnut/Industry/L.A. County	
Valley Blvd / Fairway Drive	6	Walnut/Industry/L.A. County	
Valley Blvd / Grand Avenue	8	Walnut/Industry/L.A. County	
Valley Blvd. / Lemon Avenue	8	Walnut/Industry/L.A. County	
Valley Blvd. / Pierre Rd.	3	Walnut/L.A. County	





TRAFFIC SIGNAL EQUIPMENT ON REGIONAL ARTERIALS WITHIN L.A. COUNTY			
Signalized Intersection	Phases	Ownership	
Arrow Highway / Valley Center Avenue	4	L.A. County	
Nogales Street / Northam Street	2	L.A. County	
Nogales Street / Daisetta Street	3	L.A. County	
Hacienda Boulevard / Three Palms Street (SR 60)	3	L.A. County	
Nogales Street / Colima Road	6	L.A. County	
Gale Avenue / Ninth Avenue	2	L.A. County	
Colima Road / Batson Avenue	5	L.A. County	
Colima Road / Brea Canyon Cutoff / Fairway Drive	8	L.A. County	
Colima Road /Desire Avenue	4	L.A. County	
Colima Road / Fullerton Road	6	L.A. County	
Colima Road / Jellick Avenue	5	L.A. County	
Colima Road /Larkvane Road	5	L.A. County	
Colima Road / Nausika Avenue	3	L.A. County	
Colima Road / Otterbein Avenue	5	L.A. County	
Colima Road / Paso Real Avenue	2	L.A. County	
Colima Road / Walnut Leaf Drive	Flasher	L.A. County	
Fullerton Road / Los Palacios Drive	2	L.A. County	